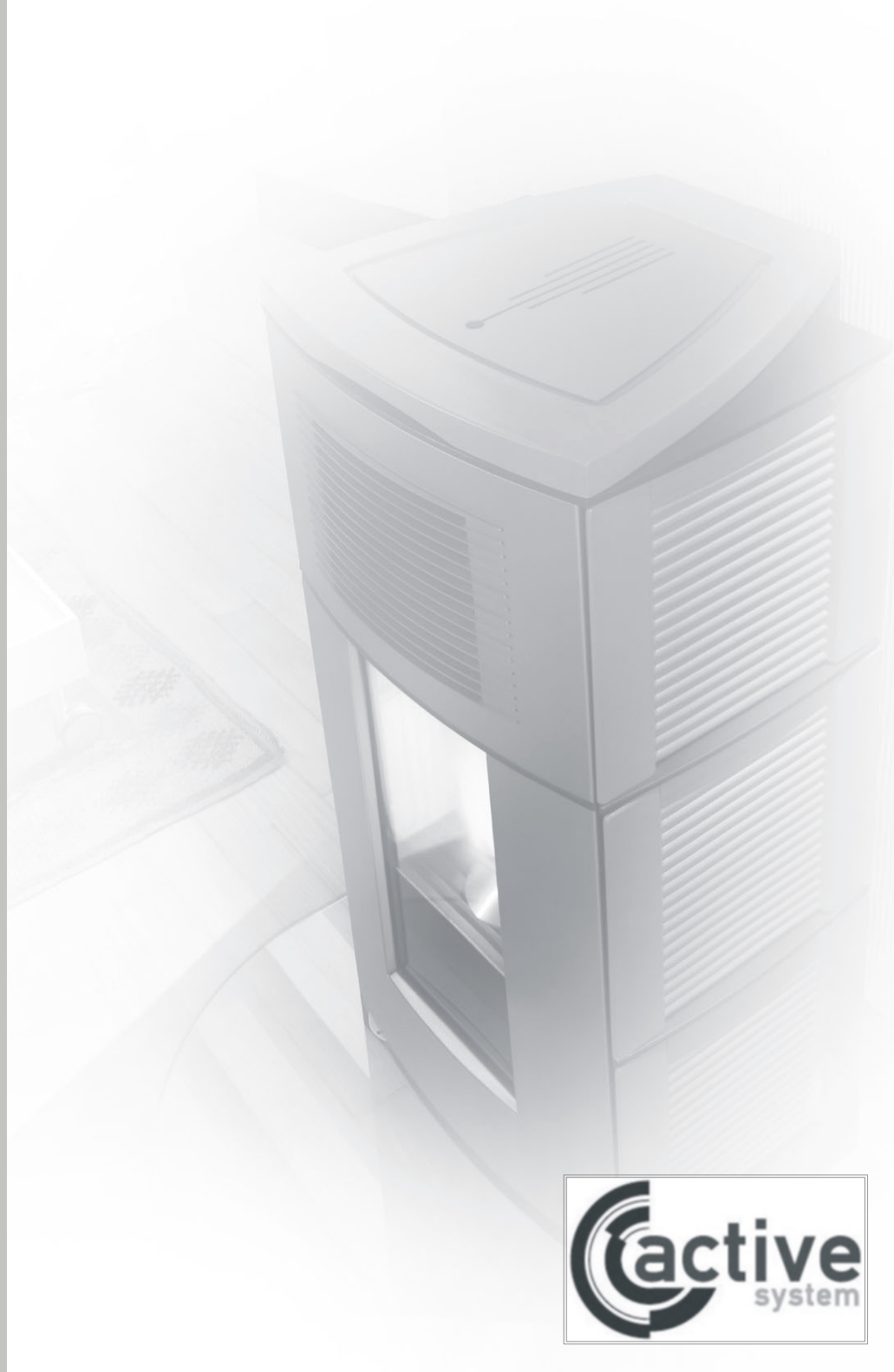


**MCZ**



**ANTARES - VEGA - ASTRA - AURORA**

# INSTALLATION AND USE MANUAL





MCZ S.p.A. - Via G.Oberdan 86, I - 33097 Vigonovo (PN) Italy.



EN 14785 - 2006



### ANTARES

Potencia nominal: Potência nominal: Nominal heat output: Brændværdi:	Max 10,3 kW Min 2,9 kW
Emisión CO ( al 13% de O2): Emissão CO (13% de O2): CO emission (at 13% O2) CO emission (ved 13% O2):	P max 0,031% P min 0,052%
Eficiencia: Eficiência: Efficiency: Virkningsgrad:	P max 85% P min 85,8%
Temperadura humos: Temperatura dos fumos: Flue gas temperature: Røggastemperatur:	190 °C
Asorbimiento electrico max: Potência electrica absorbida: Max. electrical power supply: Max. elektrisk effekt:	270 W
Tensión de funcionamiento: Tensão electrica funcionamento: Rated voltage: Netspænding:	230 V - 50 Hz.
Distancias de seguridad (retro): Distancia de segurança (trasiera): Safety clarence distance (back): Sikkerhedsafstand (bag):	200 mm
Distancias de seguridad (laterales): Distancia de segurança (lateral): Safety clarence distance (side): Sikkerhedsafstand (side):	500 mm
Producto conforme a la instalación de tubos múltiples. Produto conforme para instalação em condutas multiplas. Appliance suitable for installation in a shared flue. Apparatet kan bruges i en røggassamleledning.	
Utilizar sólo con combustibles adaptados. Utilizar somente combustivel adequado. Use only recommended fuels. Anvend kun anbefalede brændsler.	

**Leer y seguir las instrucciones! Leia atentamente e siga as instruções! Leggere e seguire le istruzioni! Read and follow the operating instructions! Følg fabrikantens**

COD: 89070062



MCZ S.p.A. - Via G.Oberdan 86, I - 33097 Vigonovo (PN) Italy.



EN 14785 - 2006



### VEGA / ASTRA / AURORA / MODULO PELLET

Potencia nominal: Potência nominal: Nominal heat output: Brændværdi:	Max 8,7 kW Min 2,6 kW
Emisión CO ( al 13% de O2): Emissão CO (13% de O2): CO emission (at 13% O2) CO emission (ved 13% O2):	P max 0,031% P min 0,052%
Eficiencia: Eficiência: Efficiency: Virkningsgrad:	P max 85,0% P min 85,8%
Temperadura humos: Temperatura dos fumos: Flue gas temperature: Røggastemperatur:	180 °C
Asorbimiento electrico max: Potência electrica absorbida: Max. electrical power supply: Max. elektrisk effekt:	270 W
Tensión de funcionamiento: Tensão electrica funcionamento: Rated voltage: Netspænding:	230 V - 50 Hz.
Distancias de seguridad (retro): Distancia de segurança (trasiera): Safety clarence distance (back): Sikkerhedsafstand (bag):	200 mm
Distancias de seguridad (laterales): Distancia de segurança (lateral): Safety clarence distance (side): Sikkerhedsafstand (side):	500 mm
Producto conforme a la instalación de tubos múltiples. Produto conforme para instalação em condutas multiplas. Appliance suitable for installation in a shared flue. Apparatet kan bruges i en røggassamleledning.	
Utilizar sólo con combustibles adaptados. Utilizar somente combustivel adequado. Use only recommended fuels. Anvend kun anbefalede brændsler.	

**Leer y seguir las instrucciones! Leia atentamente e siga as instruções! Leggere e seguire le istruzioni! Read and follow the operating instructions! Følg fabrikantens**

COD: 89070064

<b>INTRODUCTION .....</b>	<b>5</b>
<b>1. WARNINGS AND GUARANTEE CONDITIONS.....</b>	<b>6</b>
1.1. SAFETY INSTRUCTIONS .....	6
1.2. OPERATING WARNINGS .....	7
1.3. GUARANTEE CONDITIONS .....	8
1.3.1. Limitations .....	8
1.3.2. Exclusions .....	8
<b>2. THEORETICAL NOTIONS FOR INSTALLATION .....</b>	<b>10</b>
2.1. Pellets .....	10
2.2. PRECAUTIONS FOR INSTALLATION .....	11
2.3. OPERATING AREA .....	11
2.4. CONNECTION TO THE EXTERNAL AIR INTAKE .....	12
2.5. CONNECTION OF SMOKE DISCHARGE PIPE .....	13
2.6. CONNECTION TO THE FLUE PIPE .....	14
2.7. CONNECTION TO AN EXTERNAL FLUE WITH INSULATED OR DOUBLE-WALL PIPE .....	14
2.8. CONNECTION TO THE FLUE PIPE .....	14
2.9. OPERATING PROBLEMS CAUSED BY DRAUGHT DEFECTS IN THE FLUE .....	15
<b>3. INSTALLATION AND ASSEMBLY .....</b>	<b>16</b>
3.1. DRAWINGS AND TECHNICAL CHARACTERISTICS .....	16
3.1.1. VEGA .....	16
3.1.2. ASTRA .....	16
3.1.3. AURORA .....	17
3.1.4. Technical characteristics VEGA-ASTRA-AURORA .....	17
3.1.5. ANTARES .....	18
3.1.6. Technical characteristics ANTARES .....	18
3.2. PREPARATION AND UNPACK ING .....	19
3.3. INSTALLATION OF THE CERAMIC CLADDING FOR ASTRA – AURORA - ANTARES .....	20
3.4. INSTALLATION OF AIR FILTER .....	22
3.5. MAKING THE ELECTRICAL CONNECTIONS .....	22
<b>4. OPERATION .....</b>	<b>23</b>
4.1. PRE-LIGHTING WARNINGS .....	23
4.2. PRE-LIGHTING CHECK .....	24
4.3. LOADING THE PELLETS .....	24
4.4. LCD REMOTE CONTROL .....	24
4.4.1. Remote control display .....	25
4.4.2. General characteristics of the LCD remote control .....	26
4.4.3. Type of batteries and replacement .....	27
4.5. EMERGENCY PANEL .....	27
4.6. SETTINGS TO CARRY OUT BEFORE FIRST LIGHTING .....	28
4.6.1. Setting current day and time .....	28
4.6.2. Setting the temperature unit of measure .....	29
4.7. FIRST LIGHTING .....	29
4.7.1. Turning on/off from the remote control .....	29
4.7.2. Note on first ignition .....	29
4.7.3. Start-up/shutdown from emergency panel .....	30
4.8. OPERATING MODE .....	30
4.8.1. Manual and automatic .....	30
4.8.2. Manual mode .....	31
4.8.2.1. Changing from manual to automatic mode .....	31
4.8.3. Automatic mode .....	31
4.8.3.1. Changing from automatic to manual mode .....	32
4.8.4. Automatic mode with ECO-STOP .....	32
4.8.4.1. Activation /de-activation of ECO-STOP mode .....	32

4.9.	HOT AIR VENTILATION .....	33
4.10.	SLEEP FUNCTION .....	33
4.11.	TIMER .....	34
4.11.1.	Current date and clock .....	34
4.11.2.	TIMER activation and selection of a programme. ....	34
4.11.3.	TIMER de-activation. ....	36
4.12.	PRE-SET WEEKLY AND DAILY PROGRAMMES.....	36
4.12.1.	Weekly programmes.....	36
4.12.2.	Daily programmes.....	39
4.13.	PRACTICAL EXAMPLE OF WEEKLY/DAILY PROGRAMMING .....	40
4.13.1.	Setting of a weekly programme.....	40
4.13.2.	Setting of a daily programme .....	40
4.14.	INSERTION OF KEYPAD LOCK .....	42
4.15.	REPLACEMENT OF REMOTE CONTROL .....	42
4.16.	SAFETY DEVICES.....	43
4.17.	ALARM SIGNALLING .....	44
4.18.	Exiting alarm condition.....	45
4.18.1.	Mechanical shutdown of the stove .....	46
<b>5.</b>	<b>MAINTENANCE AND CLEANING .....</b>	<b>47</b>
5.1.	DAILY AND WEEKLY CLEANING .....	47
5.1.1.	Before each lighting.....	47
5.1.2.	Check every 2/3 days .....	47
5.1.3.	Cleaning the glass .....	47
5.1.4.	Cleaning of the air filter .....	48
5.2.	PERIODIC CLEANING .....	48
5.2.1.	Cleaning of the heat exchanger .....	48
5.2.2.	Shutting the stove down (end of season) .....	49
5.2.3.	Check of internal components .....	49
<b>6.</b>	<b>PROBLEMS / CAUSES / SOLUTIONS .....</b>	<b>50</b>
<b>7.</b>	<b>ELECTRICAL DIAGRAMS.....</b>	<b>52</b>

## INTRODUCTION

Dear Customer,

We wish to thank you for choosing an MCZ product, specifically a stove of the MCZ pellet line.

**In order to get the best performance from your stove and to enjoy to the full the warmth and the sense of well-being which the flame will diffuse through the home, we recommend that you read this booklet carefully before lighting the stove for the first time.**

While thanking you again, may we remind you that the stove **MUST NOT** be used by children, and that they must always be kept at a safe distance from it!





### Revisions to the publication

In order to improve the product, to keep this publication up to date the manufacturer reserves the right to make modifications without any advance notice. Any reproduction, even in part, of this manual without the consent of the manufacturer is prohibited.

### Care of the manual and how to consult it

- Take good care of this manual and keep it in a place which can easily and quickly be reached.
- If this manual should be lost or destroyed, or if it is in poor condition, ask for a copy from your retailer or directly from the manufacturer, providing product identification data.
- Information which is essential or that requires special attention is shown in **bold text**.
- *Italic text* is used to call your attention to other paragraphs in the manual or for any additional clarifications.

### SYMBOLS USED IN THE MANUAL

	<p><b>ATTENTION</b></p> <p>This warning sign indicates that the message to which it refers should be carefully read and understood, because failure to comply with what these notices say can cause serious damage to the stove and put the user's safety at risk.</p>
	<p><b>INFORMATION</b></p> <p>This symbol is used to highlight information which is important for proper stove operation. Failure to comply with these provisions will compromise use of the stove and its operation will not be satisfactory.</p>
	<p><b>OPERATING SEQUENCES:</b></p> <p>Indicates a sequence of buttons to be pushed to access menus or to make adjustments.</p>
	<p><b>MANUAL</b></p> <p>Indicates that you should carefully read this manual or the related instructions.</p>

# 1. WARNINGS AND GUARANTEE CONDITIONS

## 1.1. SAFETY INSTRUCTIONS



- **Installation of the stove, making the electrical connections, checking its operation, and maintenance are all tasks which should be carried out by qualified and authorised personnel.**
- **Install the stove in accordance with the regulations in force in your local area, region and country.**
- For the correct use of the stove and of the electronic apparatus connected to it, and to prevent accidents, the instructions given in this booklet must always be followed.
- Use, adjustment and programming must be carried out by adults. Errors or incorrect settings may cause hazardous conditions and/or poor operation.
- Before beginning any operation, the user, or whoever is preparing to operate on the stove, must have read and understood the entire contents of this instruction booklet.
- The stove is to be used only for its intended purpose. Any other use is to be considered improper and therefore hazardous.
- Do not use the stove for standing on or as any kind of support.
- Do not put clothes to dry on the stove. Any clothes hangers and suchlike must be kept a suitable distance from the stove. **Danger of fire.**
- All responsibility for improper use is taken entirely by the user and such use relieves MCZ of any civil or criminal responsibility.
- Any kind of tampering or unauthorised substitution of non-original spare parts can be hazardous for the safety of the operator and relieves MCZ of any civil or criminal responsibility.
- Most of the surfaces of the stove are extremely hot (the door, the handle, the glass, smoke discharge pipes etc.). Avoid coming into contact with these parts, therefore, without adequate protective clothing or suitable implements, such as gloves with thermal protection or implements which keep the hands cool.
- Carefully explain this hazard to elderly people, disabled people and particularly to all children, keeping them away from the stove while it is running.
- **Under no circumstances should the stove be run with the door open or the glass broken.**
- Do not touch the stove with wet hands, in view of the fact that it is an electrical appliance. Always disconnect the supply cable before doing anything to the unit.
- Before carrying out any cleaning or maintenance operation, make sure in advance that the stove is disconnected from the mains electricity supply, by

turning off the main switch located on the back of the stove, or by unplugging the supply cable.

- The stove must be connected to an electrical system which is equipped with an earth conductor, as laid down in directives 73/23 EEC and 93/98 EEC.
- The system must be of adequate rated capacity for the stated electrical power of the stove.
- Incorrect installation or faulty maintenance (not conforming to the requirements set out in this booklet) can cause harm to people, animals or property. In such cases MCZ is absolved from any civil or criminal responsibility.

## 1.2. OPERATING WARNINGS



- Shut the stove down in the event of a breakdown or bad running.
- Pellets must not be fed manually into the burner.
- Accumulated unburnt pellets in the burner after repeated failed ignitions must be removed before lighting.
- Do not wash the inside of the stove with water.
- Do not wash the stove with water. The water could get inside the unit and damage the electrical insulation and cause electric shocks.
- Do not expose your own body to hot air for extended periods. Do not overheat the room you are in and where the stove is installed. This could cause injuries and health problems.
- Do not expose plants or animals directly to a current of hot air. Both plants and animals could be harmed by it.
- Do not put any fuels in the hopper but wood pellets.
- Install the stove in a location which is suitable for firefighting, and equipped with all services such as air and electricity supply and provision for discharging combustion gases.
- If the stove and the ceramic cladding are in storage, it should be in a place that is free of damp, and they should not be exposed to extremes of temperature.
- It is inadvisable to base the stove directly on the floor, and if the floor is made of flammable material, it must be suitably insulated.
- Do not light the stove with flammable materials if the ignition system breaks down.



### INFORMATION

- In case of any problems, get in touch with your dealer, or a qualified engineer authorised by MCZ, and if a repair is necessary, insist on the use of original spare parts.
- Use only the fuel recommended by MCZ (for Italy pellets with a diameter of 6 mm and for other European countries with a diameter of 6-8 mm) and provided only with an automatic supply system.

- Periodically check and clean the smoke outlet ducts (connection to the flue pipe).
- Accumulated unburnt pellets in the burner after repeated failed ignitions must be removed before lighting.
- The pellet stove is not a cooking appliance.
- Always keep the cover of the fuel hopper closed.
- Keep this instruction manual carefully because it must stay with the stove throughout its working life. If the stove is sold or transferred to another user, always make sure that the booklet goes with the product.
- If it gets lost, ask MCZ or your authorised dealer for another copy.

### 1.3. GUARANTEE CONDITIONS



MCZ guarantees the stove, **excluding the components which are subject to normal**, for a period of two years from the date of purchase, as proved by a supporting document which gives the name of the vendor and the date on which the sale took place. The guarantee is conditional on the guarantee certificate being filled in and returned within 8 days, and requires that the product be installed and tested by a specialised installer, according to the detailed instructions given in the instruction booklet supplied with the product.

The term 'guarantee' is to be understood to denote the free-of-charge replacement or repair of **parts recognised to have been defective at the start by reason of manufacturing defects**.

#### 1.3.1. Limitations

The above guarantee does not cover components relating to electrical and electronic parts, or fans, on which the guarantee period is 1 year from the purchase of the product, documented as specified above. The guarantee does not cover parts subject to normal wear such as gaskets, glass, and any parts which can be removed from the firebox.

The replacement parts will be guaranteed for the remainder of the guarantee period starting from the date of purchase of the product.

#### 1.3.2. Exclusions

Variations in colour in the painted or ceramic parts, and crackling of the glaze on the ceramics, do not constitute grounds for a claim under the guarantee, as they are natural characteristics of the material and of the use of the product.

The guarantee does not cover any parts which may be found to be faulty as a result of negligence or carelessness in use, or of incorrect maintenance, or of installation not complying with MCZ's specification (see the relevant chapters in this user manual).

MCZ refuses to accept any responsibility for any damage which may be caused, directly or indirectly, by persons, animals or things in consequence of the failure to observe all the prescriptions laid down in

the instruction booklet, especially those concerning warnings on the subject of installation, use and maintenance of the appliance.

If the product does not perform correctly, contact your local retailer and/or importer.

Damage caused by transport and/or handling is excluded from the guarantee.

For installation and use of the product, reference must be made exclusively to the booklet supplied.

The guarantee will be invalidated in the event of damage caused by tampering with the appliance, atmospheric agents, natural disasters, electrical discharges, fire, defects in the electrical system, and caused by lack of, or incorrect, maintenance in terms of the manufacturer's instructions.



### **CLAIMS UNDER THE GUARANTEE**

**the request for action under the guarantee must be addressed to the retailer, who will forward the claim to MCZ's technical assistance service.**

**MCZ DECLARES THAT THE STOVE WHICH YOU HAVE PURCHASED COMPLIES WITH EEC DIRECTIVE 89/336 and 72/23 and SUCCESSIVE AMENDMENTS**



**MCZ refuses to accept any responsibility in the event that the stove or any other accessory have been improperly used or modified without authorisation.**

**For all replacement of parts, only original MCZ spare parts must be used.**

## 2. Theoretical notions for installation

### 2.1. Pellets

Wood pellets are manufactured by hot-extruding compressed sawdust which is produced during the working of natural dried wood. The compactness of the material comes from the lignin which is contained in the wood itself, and allows the production of pellets without the use of glues or binders.

The market offers different types of pellet with characteristics which vary depending on what mixture of woods is used. The diameter varies between 6 mm and 8 mm, with a standard length in the range 5 mm to 30 mm. Good quality pellets have a density which varies between 600 kg/m<sup>3</sup> and 750 kg/m<sup>3</sup>, with a moisture content which varies from 5% to 8% by weight.

Besides being an ecological fuel (exploiting timber residues to the maximum and achieving cleaner combustion than is possible with fossil fuels), pellets also have technical advantages. While good-quality timber has a calorific power of 4.4 kW/kg (with 15% moisture, therefore after about 18 months' seasoning), the equivalent figure for pellets is 5.3 kW/kg.

To ensure good combustion, the pellets must be stored in an area that is free of humidity and protected from dirt. The pellets are usually supplied in 15 kg. sacks, so storing them is very convenient.

Good quality pellets ensure good combustion, thus lowering the emission of harmful agents into the atmosphere.



**The poorer the quality of the fuel, the more frequently will intervention be necessary for cleaning the internal parts, such as the grate and the combustion chamber.**

The pellets must be produced from pure wood which has not been treated chemically.

The standards **DIN 51731** and **ONORM M 7135** certify a high-quality pellet with the following characteristics:

- ✓ Calorific power: 5.3 kW/kg
- ✓ Density: 700 kg/m<sup>3</sup>
- ✓ Water content: max 8% of weight
- ✓ Percentage of ashes: max 1% of weight
- ✓ Diameter: 6 – 6.5mm
- ✓ Length: max 30mm
- ✓ Contents: 100% untreated wood, with no added bonding substances (bark percentage 5% max)
- ✓ Packaging: in sacks made from ecologically compatible or biologically decomposing material



Fuel pellets



15 Kg sack of fuel



**MCZ strongly recommends using certified fuel in its stoves.**

**The use of fuel of inferior quality or not conforming to the specification given above compromises the running of your stove and can therefore lead to the termination of the guarantee and of the manufacturer's responsibility for the product.**

**MCZ pellet stoves run exclusively on pellets with a diameter of 6 mm (only for Italy) and 6-8 mm (European countries) with lengths that go from 5 mm to 30 mm.**

## **2.2. PRECAUTIONS FOR INSTALLATION**



### **IMPORTANT!**

**Installation and assembly of the stove must be carried out by qualified personnel.**

The stove must be installed in a suitable position to allow the normal operations of opening and ordinary maintenance.

The site must be:

- capable of providing the environmental conditions for operation
- equipped with power supply 230V 50 Hz (EN73-23)
- capable of taking an adequate system for smoke discharge
- provided with external ventilation
- provided with an earth connection complying with CEI 64-8

**The stove must be connected to a flue pipe or an internal or external vertical duct conforming to current standards UNI 7129 - 7131 9615.**

**The stove must be positioned in such a way that the electrical plug is accessible.**



### **IMPORTANT!**

**The stove must be connected to a flue pipe or a vertical duct which can discharge the fumes at the highest point of the building.**

**The fumes are however derived from the combustion of wood products, and if they come into contact with or close to walls, they can make dirty marks.**

**Also take care because the fumes are very hot but almost invisible, and can cause burns on contact.**

**The holes for the passage of the smoke pipe and for the intake of air from outside should be made before positioning the stove unit.**

## **2.3. OPERATING AREA**

For proper functioning and a good temperature distribution, the stove should be positioned in a location where it is able to take in the air necessary for combustion of the pellets (about 40 m<sup>3</sup>/h must be

available), as laid down in the standard governing the installation and in accordance with local national standards.

The volume of the room must not be less than 30 m<sup>3</sup>.

The air must come in through permanent openings made in walls (in proximity to the stove) which give onto the outside, with a minimum cross-section area of 100 cm<sup>2</sup>.

These openings must be made in such a way that it is not possible for them to be obstructed in any way.

Alternatively, the air can be taken from rooms adjacent to the one which needs ventilating, as long as they are provided with an air intake from the outside, and are not used as bedrooms or bathrooms, and provided there is no fire risk such as there is for example in garages, woodsheds, and storerooms, with particular reference to what is laid down in current standards.



**It is not permissible to install the stove in bedrooms, bathrooms or showers, or in a room where another heating appliance is installed (fireplace, stove etc.) which does not have its own independent air intake.**

**Locating the stove in a room with an explosive atmosphere is prohibited.**

**The floor of the room where the stove is to be installed must be strong enough to take its weight.**

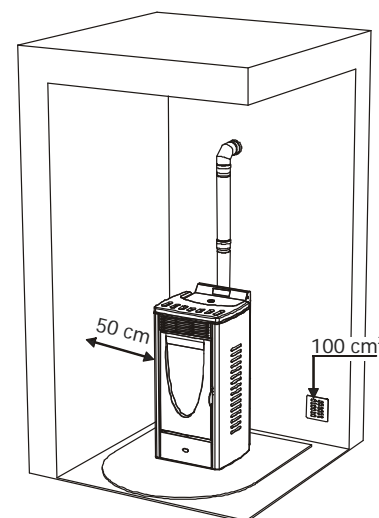
If the walls are not flammable, position the stove with a clearance to the rear of at least 10 cm.

For flammable walls, keep a minimum distance of 20 cm at the rear, 50 cm on the sides and 150 cm at the front.

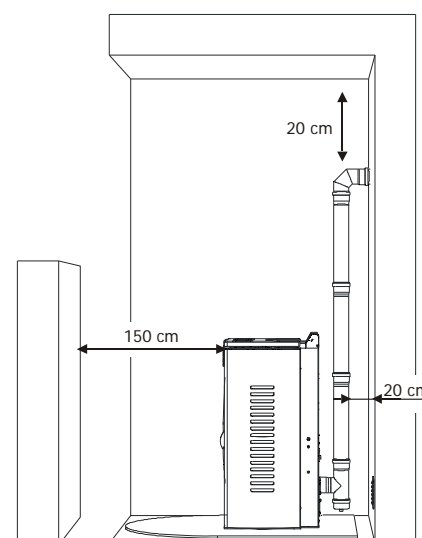
If the room contains objects which are believed to be particularly delicate, such as drapes, sofas and other furniture, their distance from the stove should be considerably increased.



**If the flooring is made of wood, provide a floor protection surface in compliance with current national standards.**



Example of pellet stove installation



Example of pellet stove installation

## 2.4. CONNECTION TO THE EXTERNAL AIR INTAKE

It is essential that at least as much air must be able to flow into the room where the stove is installed as is required for proper combustion in the appliance and for the ventilation of the room. This can be effected by means of permanent openings in the walls of the room to be ventilated, which give onto the outside, or by single or collective ventilation ducts.

For this purpose, on the external wall near the stove, a hole must be made with a minimum free cross-section of 100 cm<sup>2</sup>. (equivalent to a round hole of 12 cm diameter or a square hole 10x10 cm), protected by a grille on the inside and the outside.

The air intake must also:

- communicate directly with the room where the stove is installed
- be protected by a grille, metal mesh or suitable guard, as long as this does not reduce the area below the minimum.
- be positioned in such a way as to be impossible to obstruct





**It is not compulsory to connect the air intake directly with the stove (so that it draws air directly from outside), but it is essential at all events to ensure an airflow of 50 cubic metres per hour by the use of a hole of the dimensions given.**

**See standard UNI 10683 REV.**

## 2.5. CONNECTION OF SMOKE DISCHARGE PIPE

When making the hole for the passage of the smoke discharge pipe, it is necessary to take into account the possible presence of flammable materials. If the hole will be going through a wall made of wood or any other material which is sensitive to heat, the **INSTALLER MUST** first of all use the special wall union (diam.13cm 13cm minimum) and properly insulate the pipe of the stove that passes through it, using adequate insulation materials (thickness 1.35cm with minimum thermal conductivity of 0.07 W/m°K).

The same is true if the stove pipe must run through vertical or horizontal stretches passing in proximity (min.20cm) to the heat-sensitive wall

As an alternative we recommend the use of insulated pipe, which can also be used on the outside to avoid condensation.

The combustion chamber works in low pressure. The smoke duct for the discharge of fumes will also be under low pressure when connected to an efficient flue pipe as directed.



**Pipes and unions with suitable gaskets must always be used, to guarantee a hermetic seal.**



All sections of the smoke duct must be inspectable and removable to enable periodic internal cleaning. Tee connectors with inspection caps should be used.

Position the stove bearing in mind all the instructions and considerations above.



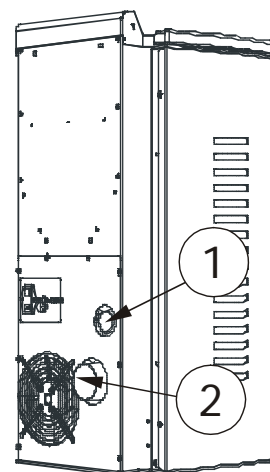
### **IMPORTANT!**

**All 90 degree changes of direction in the flue pipe must be fitted with suitable tee connectors to allow the possibility of inspection. (see accessories for pellet stove)**

**It is absolutely prohibited to fit a grille on the end of the discharge pipe, because it could lead to poor running of the stove.**

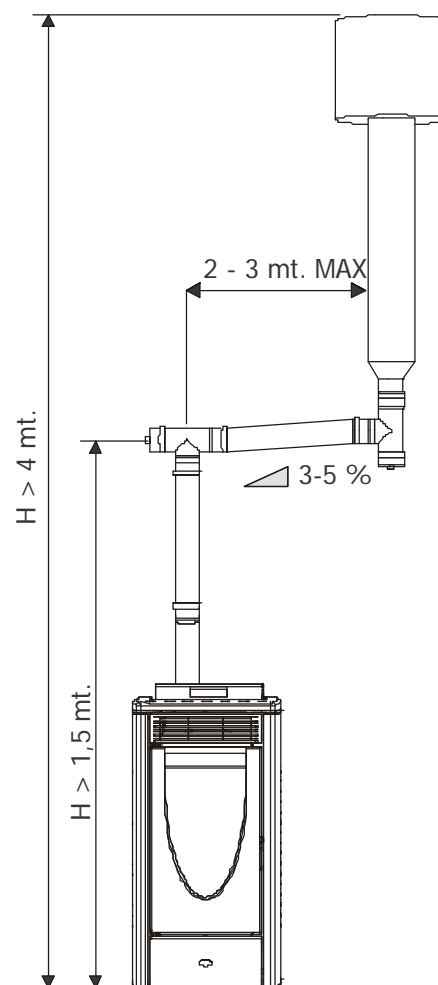
**FOR CONNECTION TO THE FLUE PIPE, NOT MORE THAN 2-3 METRES OF HORIZONTAL PIPE MUST BE USED AND NOT MORE THAN THREE 90° CURVES MUST BE USED**

**IT IS ALSO ADVISABLE NOT TO EXCEED 6 METRES IN LENGTH WITH THE PIPE Ø 80 mm**



Rear view of a pellet stove

- 1) Combustion air intake
- 2) Smoke outlet



Example of pellet stove installation

## 2.6. CONNECTION TO THE FLUE PIPE

The flue pipe must have internal dimensions not larger than 20 x 20 cm, or diameter 20 cm. In the event of larger dimensions, or of the flue pipe being in poor condition (for example cracks, poor insulation, etc.), it is advisable to fit a stainless steel pipe of suitable diameter inside the flue pipe throughout its length, right up to the top.

Check with suitable instruments that there is a minimum draught of 10 Pa.

At the bottom of the flue pipe, provide an inspection cap to allow periodic checking and cleaning, **which must be done annually**.

Make a gas-tight connection to the flue pipe, using pipes and connectors as recommended by us.

You must ensure that a windproof cowl should be fitted which complies with the standards in force.



**This type of connection ensures the evacuation of the fumes even in the event of a temporary power cut.**

## 2.7. CONNECTION TO AN EXTERNAL FLUE WITH INSULATED OR DOUBLE-WALL PIPE

The external fluepipe must have internal dimensions of minimum 10x10 cm or 10 cm diameter, and maximum 20x20 cm or 20 cm diameter.

Check with suitable instruments that there is a minimum draught of 10 Pa.

The only type of pipe which is permissible is insulated (double-walled) stainless steel, smooth on the inside, fixed to the wall. Flexible stainless steel pipe must not be used. At the bottom of the flue pipe, provide an inspection cap to allow periodic checking and cleaning, **which must be done annually**. Make a gas-tight connection to the flue pipe, using pipes and connectors as recommended by us.

You must ensure that a windproof cowl should be fitted which complies with the standards in force.



**This type of connection ensures the evacuation of the fumes even in the event of a temporary power cut.**

## 2.8. CONNECTION TO THE FLUE PIPE

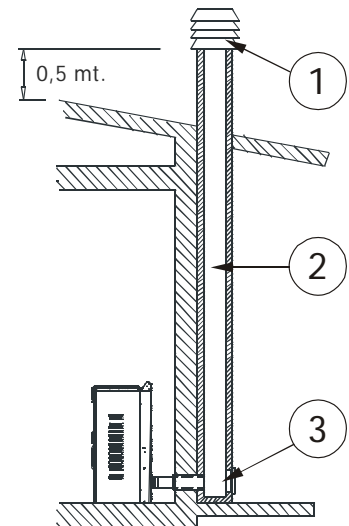
For proper functioning, the connecting pipe between the stove and the chimney or flue duct must have a slope of not less than 3% in the horizontal stretches, the length of which **must not exceed 2/3 metres**, and the vertical distance between one tee connector and another (change of direction) must not be less than 1.5m.

Check with suitable instruments that there is a minimum draught of 10 Pa.

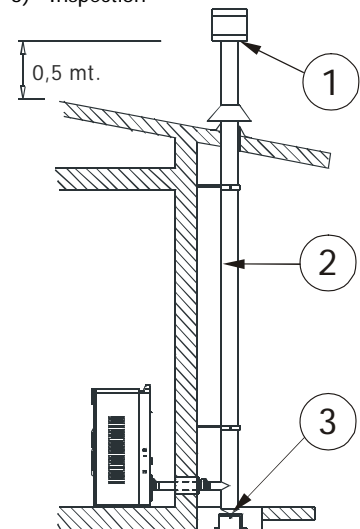
At the bottom of the flue pipe, provide an inspection cap to allow periodic checking and cleaning, **which must be done annually**.

Make a gas-tight connection to the flue pipe, using pipes and connectors as recommended by us.

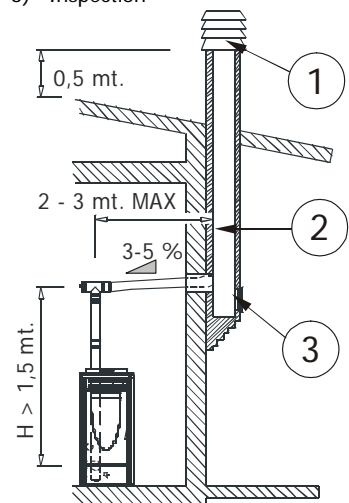
You must ensure that a windproof cowl should be fitted which complies with the standards in force.



- 1) Windproof cowl
- 2) Flue pipe
- 3) Inspection



- 1) Windproof cowl
- 2) Flue pipe
- 3) Inspection



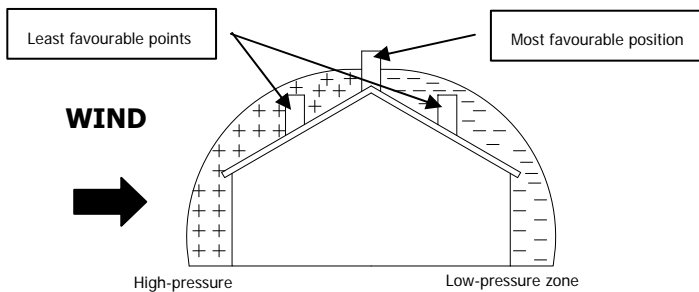
- 1) Windproof cowl
- 2) Flue pipe
- 3) Inspection



**This type of connection ensures the evacuation of the fumes even in the event of a temporary power cut.**

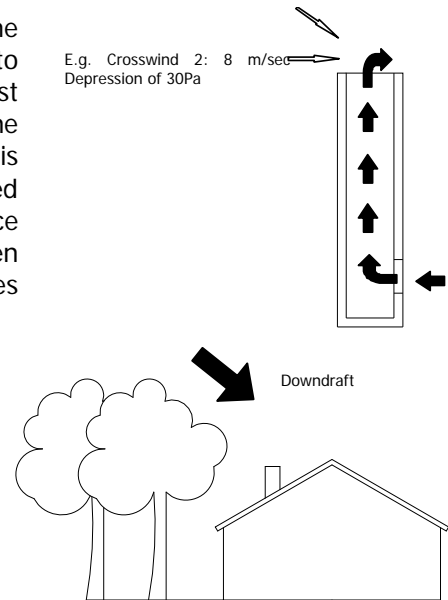
## 2.9. OPERATING PROBLEMS CAUSED BY DRAUGHT DEFECTS IN THE FLUE

Of all the weather and geographical conditions which affect the operation of a flue pipe (rain, fog, snow, altitude a.s.l., exposure to sunlight, direction of facing), the **wind** is unquestionably the most decisive. In fact, along with thermal depression caused by the difference in temperature inside and outside of the chimney, there is another type of depression or over-pressure: dynamic pressure caused by the wind. An updraft always increases depression and hence draught. A crosswind increases depression provided the cowl has been installed properly. A downdraft always decreases depression, at times inverting it.



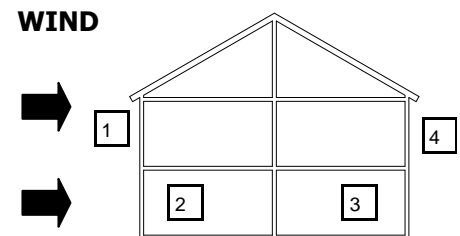
E.g. Downdraft at 45° of 8m/sec. Overpressure of 17 Pa

E.g. Crosswind 2: 8 m/sec  
Depression of 30Pa



Besides the direction and force of the wind, the position of the flue and the cowl with respect to the roof of the building and the surrounding landscape is important.

The wind also influences the operation of the chimney indirectly by creating high-pressure and low-pressure zones, not only outside the building but inside as well. In rooms directly exposed to the wind **(2)**, an indoor high-pressure area can be created which can augment the draught in stoves and fireplaces, but it can be counteracted by the external high pressure if the cowl is situated on the side exposed to the wind **(1)**. On the other hand, in the rooms on the opposite side from the direction of the wind **(3)**, a dynamic depression can be created which competes with the natural thermal depression developed by the chimney, but this can be compensated for (sometimes) by locating the flue on the opposite side from the direction of the wind **(4)**.



**1-2 = High-pressure zones**

**3-4 = Low-pressure zones**



### **IMPORTANT!**

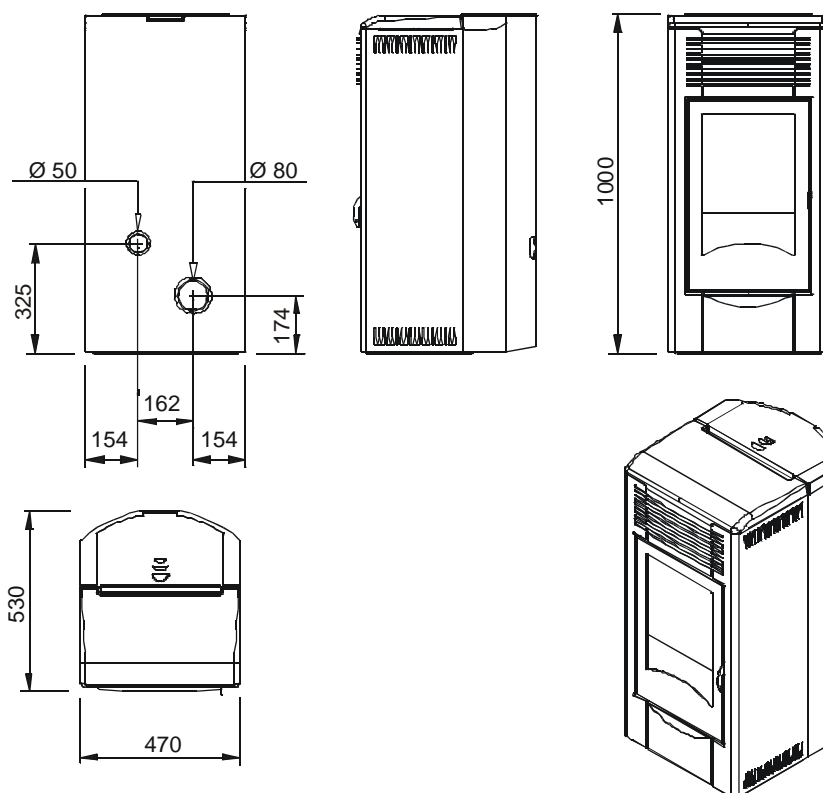
**The operation of the pellet stove is noticeably sensitive to the conformation and position of the flue which is adopted.**

**Hazardous conditions can only be overcome by suitable setting-up of the stove carried out by qualified MCZ personnel.**

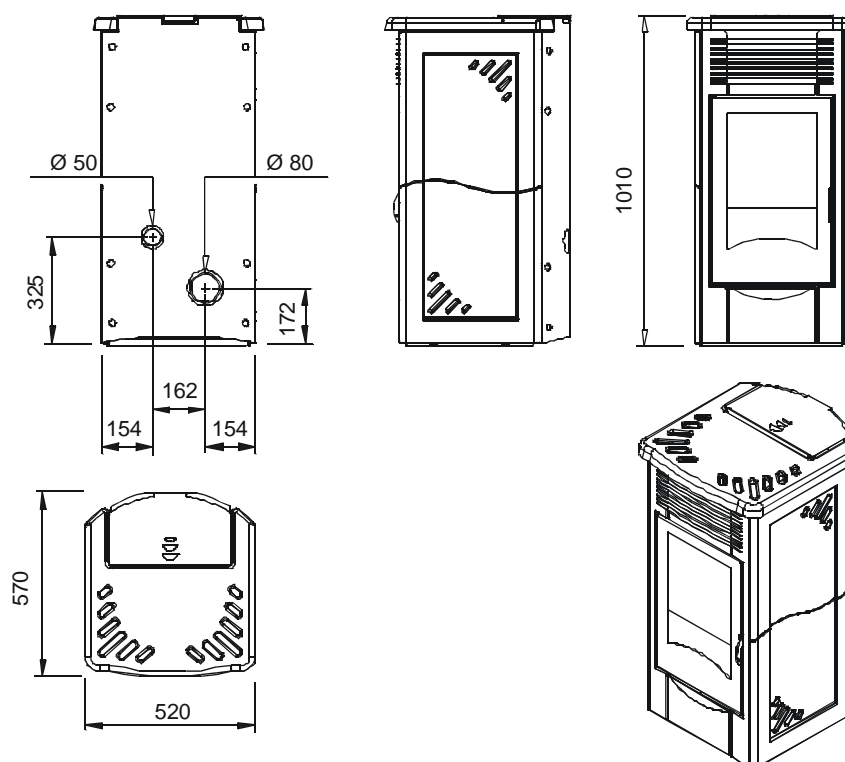
### 3. INSTALLATION AND ASSEMBLY

#### 3.1. DRAWINGS AND TECHNICAL CHARACTERISTICS

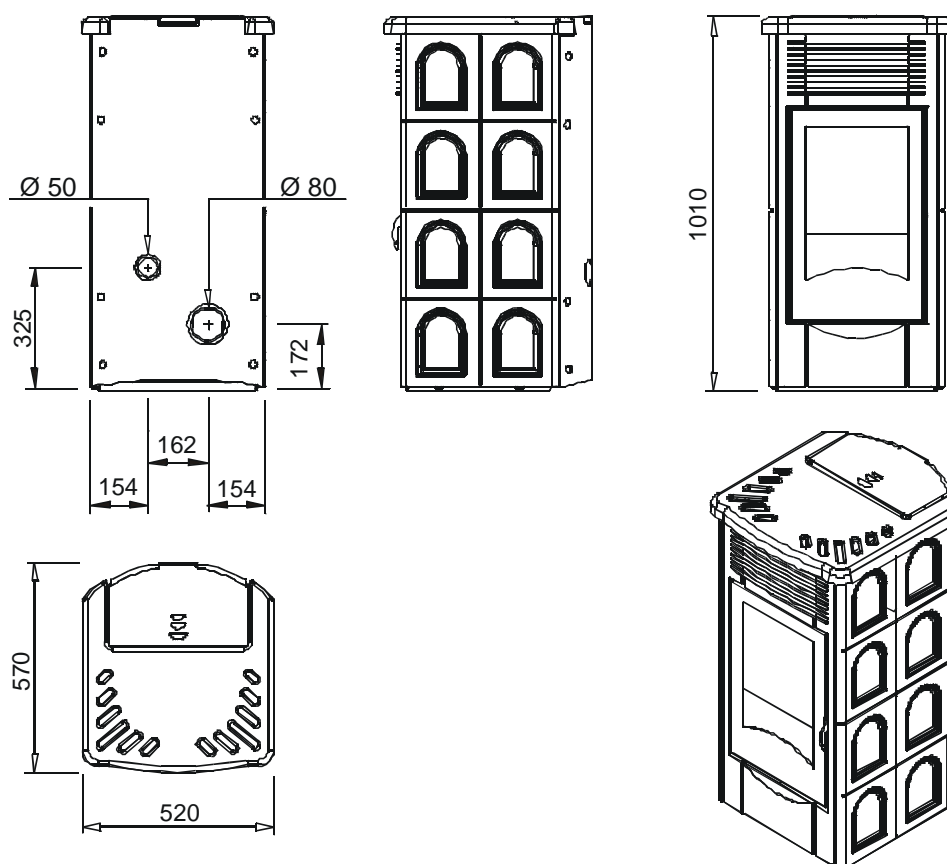
##### 3.1.1. VEGA



##### 3.1.2. ASTRA



### 3.1.3. AURORA



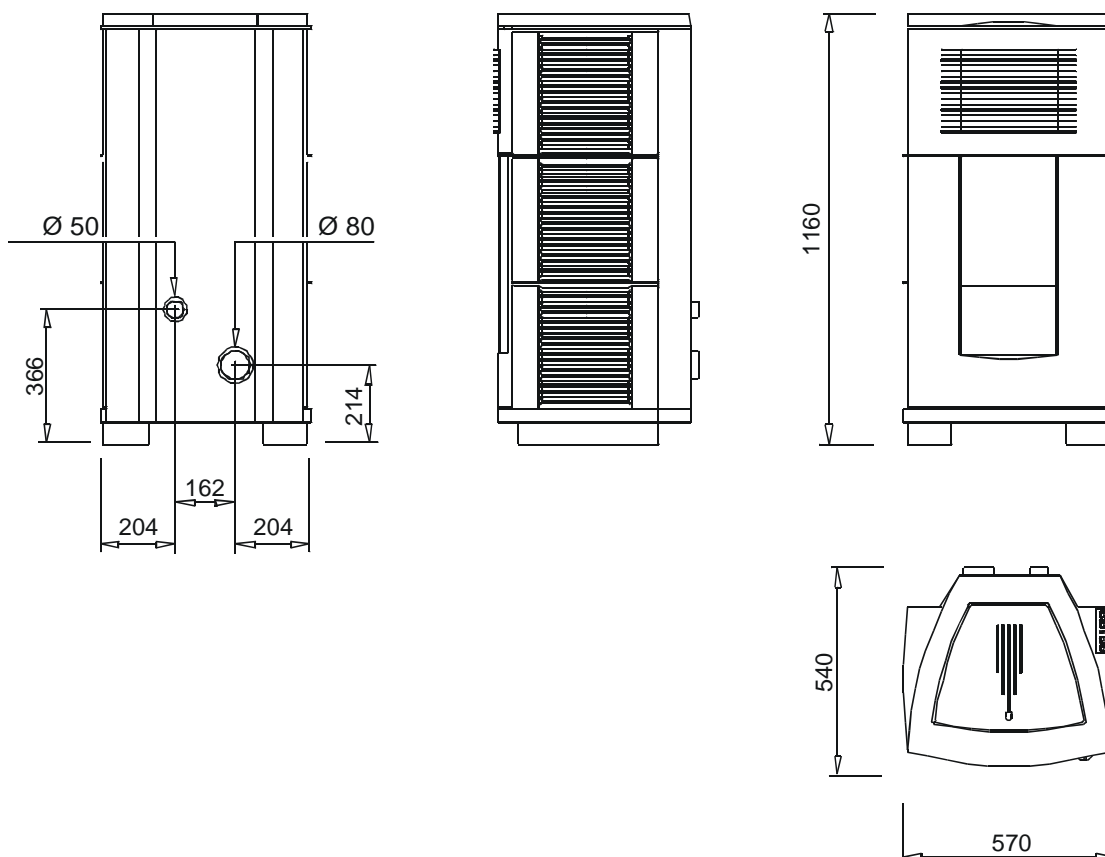
### 3.1.4. Technical characteristics VEGA-ASTRA-AURORA

Technical characteristics		VEGA-ASTRA-AURORA
Overall thermal power	Max.	8.7 kw / 7482 kcal
Overall thermal power	Min.	2.6 kw / 2236 kcal
Yield at maximum		85 % (> 85%)
Yield at minimum		85.8 % (> 85%)
Temperature of exhaust smoke at maximum		180°C
Temperature of exhaust smoke at minimum		120°C
CO at 13%O <sub>2</sub> at minimum and maximum		0.052 — 0.031%
CO <sub>2</sub> at minimum and maximum		4.5% — 5.9%
Mass of smoke at minimum and maximum		4.6 — 11.5 g/sec
Minimum draught at maximum power		0,12 mbar — 12 Pa
Minimum draught at minimum power		0,10 mbar — 10 Pa
Hopper capacity		23 litri
Fuel pellet type		Pellet diameter 6-8 mm. Length range 5-30 mm
Pellet consumption per hour		Min ~ 0.6 kg/h *    Max. ~ 2 kg/h *
Operating time between re-fuelling		At min~ 25 h *    At max. ~ 7,5 h *
Heatable volume m <sup>3</sup>		185/40 — 215/35 — 250/30 **
Combustion air inlet		Ø 50 mm.
Smoke outlet		Ø 80 mm.
Maximum absorbed electrical power		270 Watt
Power supply frequency and voltage		220 Volt / 50 Hz
Net weight		125 Kg.
Weight with packaging		135 Kg.

\* Data that may vary depending on the type of pellets used.

\*\* Heatable volume based on demand of cal/m<sup>3</sup> 40-35-30 (respectively 40-35-30 Kcal/m<sup>3</sup>)

### 3.1.5. ANTARES



### 3.1.6. Technical characteristics ANTARES

Technical characteristics	Antares
Overall thermal power Max.	10.3 kw / 8858 kcal
Overall thermal power Min.	2.9 kw / 2494 kcal
Yield at maximum	85 % (> 85%)
Yield at minimum	85.8 % (> 85%)
Temperature of exhaust smoke at maximum	190°C
Temperature of exhaust smoke at minimum	120°C
CO at 13%O <sub>2</sub> at minimum and maximum	0.052 — 0.031%
CO <sub>2</sub> at minimum and maximum	4.5% – 5.9%
Mass of smoke at minimum and maximum	4.6 – 12.1 g/sec
Minimum draught at maximum power	0,12 mbar – 12 Pa
Minimum draught at minimum power	0,10 mbar – 10 Pa
Hopper capacity	43 lt.
Fuel pellet type	Pellet diameter 6-8 mm. Length range 5-30 mm
Pellet consumption per hour	Min ~ 0.7 kg/h *    Max. ~ 2,2 kg/h *
Operating time between re-fuelling	At min~ 40 h *    At max. ~ 13 h *
Heatable volume m <sup>3</sup>	185/40 – 215/35 – 250/30 **
Combustion air inlet	Ø 50 mm.
Smoke outlet	Ø 80 mm.
Maximum absorbed electrical power	270 Watt
Power supply frequency and voltage	220 Volt / 50 Hz
Net weight	125 Kg.
Weight with packaging	135 Kg.

\* Data that may vary depending on the type of pellets used.

\*\* Heatable volume based on demand of cal/m<sup>3</sup> 40-35-30 (respectively 40-35-30 Kcal/m<sup>3</sup>)

### 3.2. PREPARATION AND UNPACKING

Stoves are delivered in two packages:

- ✓ The first contains the stove (Fig. 1)
- ✓ The second contains the ceramic cladding. (Fig. 2)

Open the packaging, take off the bands, remove the stove unit from the pallet and position it in the chosen location, taking care that its position complies with the above instructions.

The stove body or unit must always be kept in a vertical position when moved, and moved only using carts. Special care must be used to protect the door and the glass from impacts that would damage them.

Moving the product must always be done with care. If possible, unpack the stove in the area where it is going to be installed.

The materials which make up the packaging are not toxic or harmful, so no special procedures for disposal are required.

Their storage, disposal or possible recycling are therefore the responsibility of the final user, in compliance with current legislation on the subject.

Do not store the stove unit or its cladding without their packaging.

If the stove needs to be connected to a discharge pipe which goes through the rear wall (to connect up with the flue), take the greatest care to make sure that the joint is not stressed.

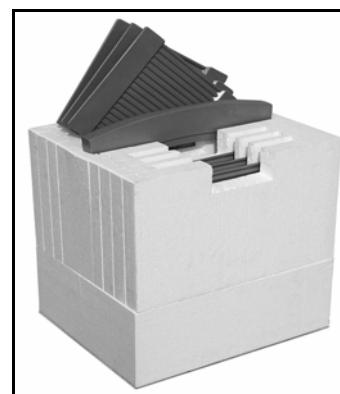
Use the four adjustable feet **(J)** to get the stove correctly levelled so that the smoke outlet **(S)** is lined up with the connecting pipe **(H)**.



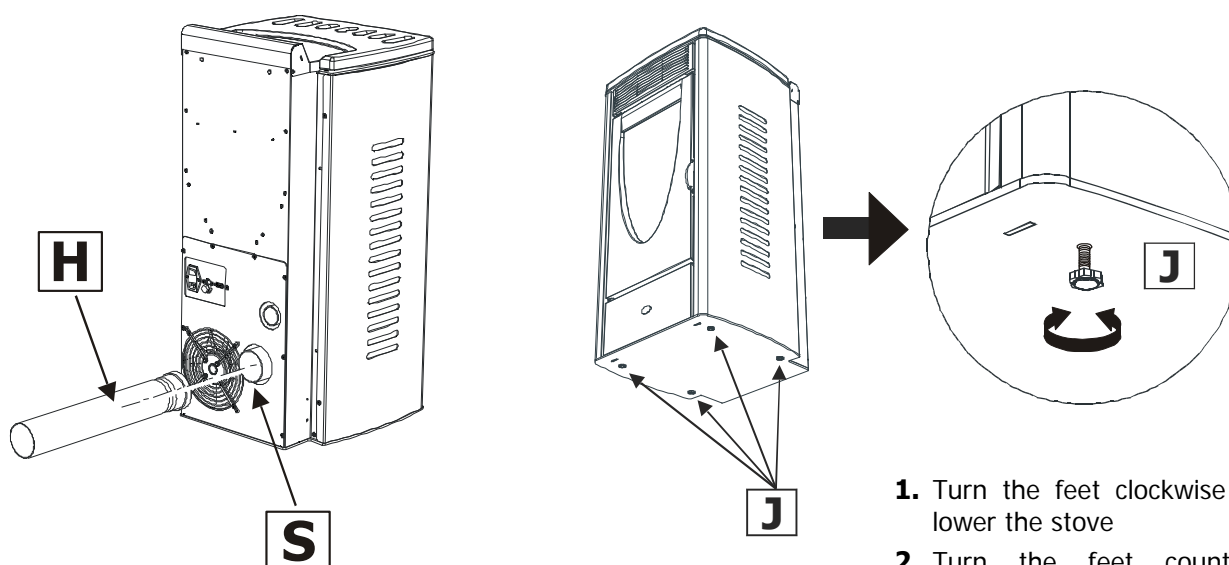
**If the smoke outlet of the stove is forced or used improperly to lift it or position it, the operation of the stove can be damaged irreparably (fig. 4).**



**Figure 1** – Example of stove packaging



**Figure 2** - Example of packing for ceramics



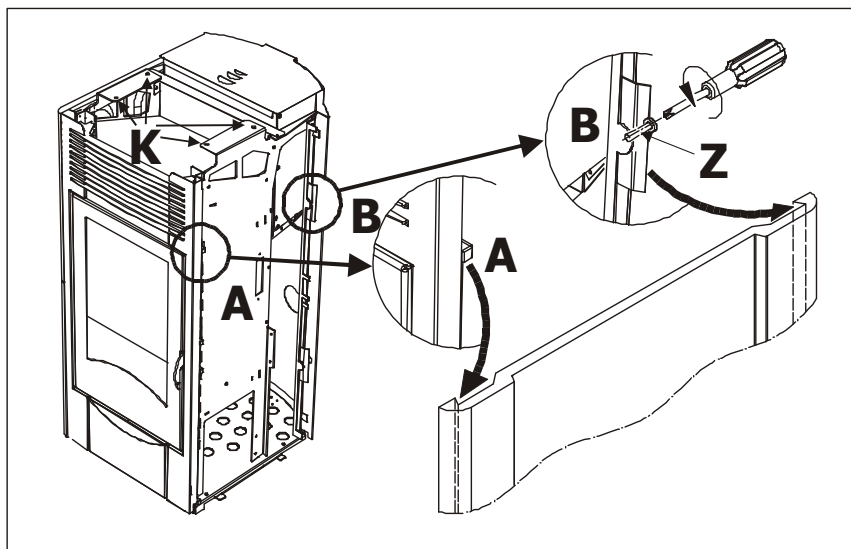
- 1.** Turn the feet clockwise to lower the stove
- 2.** Turn the feet counter-clockwise to lower the stove

### 3.3. INSTALLATION OF THE CERAMIC CLADDING FOR ASTRA – AURORA - ANTARES

#### A LOOK AT THE HEATER:

The **couplers (A)**, located on the front part, have a fixed position and need no adjustment.

The **couplers (B)**, located on the rear part, are temporarily fastened to the frame of the heater. Loosen the screw **(Z)** that blocks them (without removing it completely) so that they can be moved horizontally.



Take a tile from the package (complete with its pins already inserted), bring it sideways against the heater and insert the tile from the front so that the **couplers (A)** rest against the front undercut of the ceramic tile.

Rest the rear part of the tile against the frame of the heater, take the **rear coupler (B)** and, using its screw as a grip, move it so that its hook end holds the rear undercut of the ceramic tile.

Check that the position is correct and tighten the screw until the majolica is well anchored and immovable.

Repeat the procedure for the other tiles.



**NEVER TIGHTEN THE TILE-BLOCKING SCREW COMPLETELY, OTHERWISE THE MAJOLICA MAY BREAK.**



**THE ASSEMBLY OF THE TILES MUST ALWAYS BEGIN FROM THE BOTTOM.**

Assemble the top tile last by resting it on the four **rubber bulbs (K)**. Pressing crosswise with your fingertips, check that the latter has a stable position and, if necessary, level the points using the rubber bulb or washer underneath.



After levelling the last tile, make sure the cornice is fastened correctly to the structure of the heater, checking that the latter is firmly anchored.

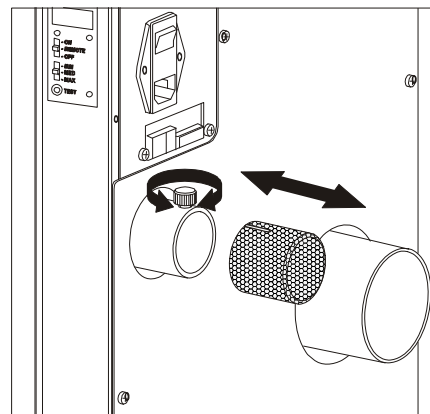
### 3.4. INSTALLATION OF AIR FILTER

**Before placing the stove near the wall for connection to the flue pipe and to the electrical mains, install the air filter provided with the stove.**

The cylindrical filter is composed of a metallic net and is included with the accessories (along with the glove, hook, instructions, and so on).

The filter must be inserted on the air inlet pipe Ø 5 cm.

To remove it, slightly loosen the screw with the knob on the air inlet, insert the filter matching it with the filter groove with the screw of the knob and then secure it by tightening the knob.



Installation/removal of air filter



#### **ATTENTION!**

**Never operate the stove without the air filter. MCZ shall not be held liable for damage to internal components if this instruction is not followed.**

### 3.5. MAKING THE ELECTRICAL CONNECTIONS

Connect the supply cable first at the rear of the stove and then to an electrical outlet on the wall.

The main switch located on the rear of the stove should be switched on only when you want to light the stove.



**If you do not intend to use the stove, it is advisable to keep it switched off.**



Electrical connection of the stove

## 4. OPERATION

### 4.1. PRE-LIGHTING WARNINGS



**Do not touch the stove during the first lighting, as it is during this phase that the paint sets. If you touch the paint, you may expose the steel surface.**

If necessary, touch up the paint with the aerosol spray in the original colour (see the section "Accessories for pellet stoves").



**It is good practice to provide plenty of ventilation in the room during the initial lighting, as the stove will give off a small amount of smoke and smell of paint.**

Do not stay near the stove, and as previously mentioned, ventilate the room. The smoke and the smell of paint will vanish after about one hour of operation. There are no health risks involved.

The stove will be subject to expansion and contraction during the stages of lighting and cooling down, and may therefore make slight creaking noises.

This phenomenon is absolutely normal, the structure being made of sheet steel, and must not be considered a fault.

It is extremely important to be sure not to take the stove to full heat straight away, but to bring it gradually up to temperature.

If in manual mode, use low heating powers (for example 1<sup>a</sup>-2<sup>a</sup>-3<sup>a</sup>). During subsequent use, you will be able to make use of all available heating power (e.g. 4<sup>a</sup>-5<sup>a</sup>), but remember not to keep the stove running on full power for more than 60-90 minutes.

In this way you will avoid damage to the ceramic panels, the welds and the steel structure.



**At first lighting the stove is already in manual mode. At first, it is advisable to use the only low and medium heating levels (from first to third power level).**



**Do not demand full heating performance straight away!**

Try to get familiar with commands given from the control panel or remote control.

Try to memorize the messages that the stove provides on the display of the remote control.

## 4.2. PRE-LIGHTING CHECK

Check that all the safety conditions described above have been met.  
Make sure you have read and completely understood the contents of this instruction booklet.

Remove any components which might burn from the firebox and from the glass (various instructions and adhesive labels).

Check that the grate **A** is properly positioned and rests correctly on the base.



After long periods of disuse, remove from the hopper (**using a vacuum cleaner with an extension**) any remains of pellets which have lain there for some time, since they may have absorbed moisture, which changes their original characteristics and makes them unsuitable for burning.



## 4.3. LOADING THE PELLETS

Fuel is loaded from the upper part of the stove by opening a door. Pour the pellets in the hopper. When empty, it will hold slightly more than a 15 kg sack.

This is easier if performed in two steps:

- Pour half of the contents into the hopper and wait for the fuel to settle on the bottom.
- Then pour in the rest

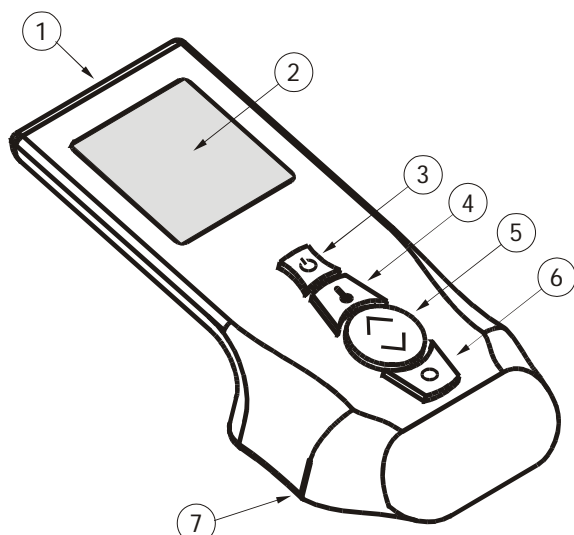


**Never remove the protection grille in the hopper. When filling, do not let the sack of pellets touch any hot surfaces.**

**Do not place any type of fuel in the hopper other than pellets that are compliant with the specifications provided previously.**



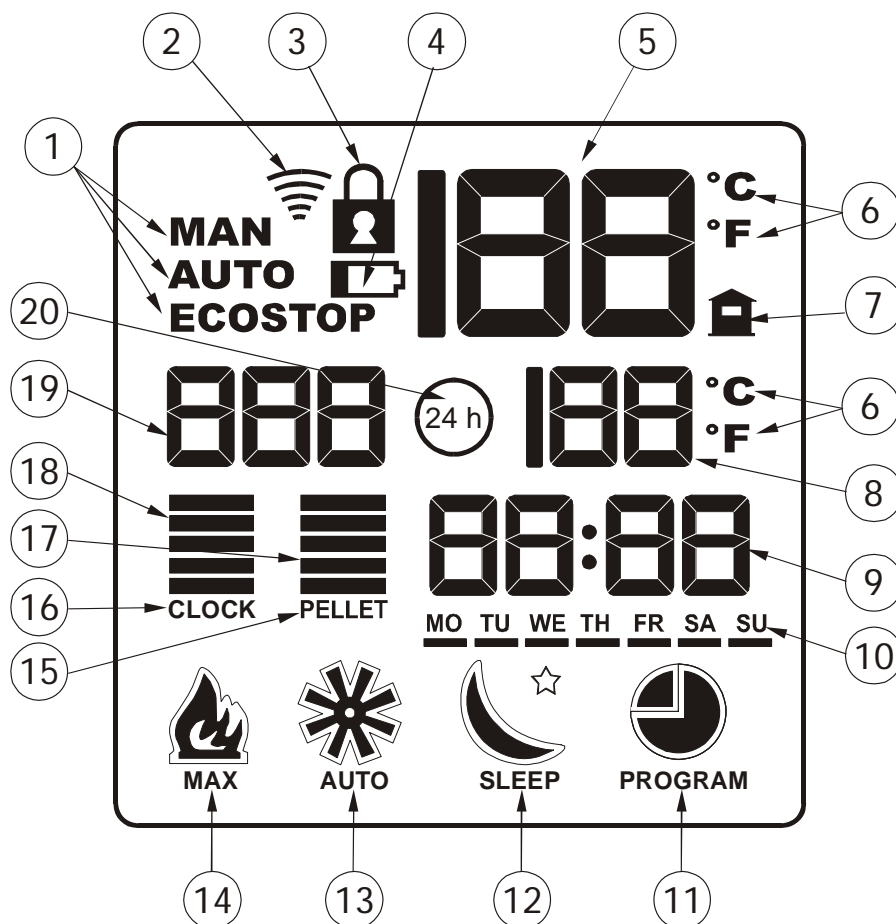
## 4.4. LCD REMOTE CONTROL



### KEY

1. Position of the room temperature probe
2. Back-lit LCD
3. On/off button. By pressing this button in combination with others, you can access other menus such as the one for setting the current time.
4. Button to select operating mode (MANUAL – AUTOMATIC – AUTOMATIC WITH ECO-STOP). By pressing this button in combination with others, you can access other menus such as the one for setting the current time.
5. Button for scrolling up or down to adjust ventilation and flame power, and to adjust Sleep and Timer
6. The MENU button lets you access setting menus for ventilation, SLEEP mode and TIMER
7. Support base that contains the battery compartment

### 4.4.1. Remote control display



#### KEY

1. Icons that indicate the operating mode of the stove (MANUAL – AUTOMATIC – AUTOMATIC WITH ECO STOP)	12. Icon that indicates the SLEEP function. If completely off, SLEEP is deactivated. If only the border of the icon is on, SLEEP is active, meaning that the stove will shut off at the end of a countdown set by the user and visible in icon no. 9. If the icon is completely on, it indicates SLEEP setting mode.
2. Icon for data transmission to stove	13. Icon for ventilation which allows setting of the speed of the hot air fan. If the message AUTO is also on, it means that ventilation is connected to the power.
3. This icon, if on, indicates that the keyboard is locked (provided to prevent accidentally pressing keys)	14. Icon of the flame that allows adjustment of the flame to one of five power levels. If the flame is at power setting 5, the message MAX will also appear.
4. If this icon is on steady it means that the batteries need to be replaced.	15. This icon, if active, indicates that it is possible to adjust the downloading of the pellets (specialized technician only)
5. This icon shows the temperature in the room where the remote control is, by means of a sensor inside the remote control	16. This icon, if active, indicates that it is possible to adjust the time that appears in icon no. 9
6. Unit of measure selected to display set/measured temperature (degrees Celsius – Fahrenheit)	17. These bars indicate the ventilation power: 1 bar = 1st speed; two bars = 2nd speed;...five bars = 5th speed
7. This icon appears with the room temperature measured by the sensor in the remote control	18. These bars indicate the flame power: 1 bar = 1st power; two bars = 2nd power;...five bars = 5th power These bars appear only if the stove is in MANUAL operation mode
8. Temperature set by the user, which is to be reached in AUTOMATIC mode. In MANUAL mode this signal will be off.	19. This icon is necessary for the selection of the weekly programme when setting the TIMER. It is also used to select the daily programmes in the personalized timer programme.
9. Internal clock. It can temporarily be used to provide a countdown if the SLEEP function is active.	20. When setting the TIMER, if this icon is on together with no. 19, it indicates that you are choosing a personalized weekly programme (which requires the insertion of daily time periods -> 24h)
10. Icons that indicate the current day (in English). When setting the personalized TIMER, the bars underneath, if on, indicate that for that day certain time periods have been activated	
11. Icon that indicates the TIMER function. If completely off, the TIMER is deactivated. If only the border of the icon is on, the TIMER is active. If the icon is completely on, it indicates TIMER setting mode.	

## PLEASE NOTE:

Icons 11, 12, 13, and 14 may be on in two different ways:

- **COMPLETELY LIT (ICON COMPLETELY BLACK)**
- **ONLY BORDER OF ICON LIT**

When **the icons are completely lit** it means that work is being carried out in this function.

**Example:** if the symbol of the fan is completely on, it means you are changing the hot air fan speed via button **no.5**.

If **only the borders of the icons** are lit it means that the function is active but cannot be modified except by entering the corresponding item from the menu. When you enter the corresponding menu, the icon comes on completely (see above)

**Example:** if only the border of the icon for the fan is on, it will not be possible to modify the fan speed by pressing button **no.5** but the function is active because the fan is operating (if the stove is on). In order to change the fan speed, it is necessary to access the menu that allows this adjustment and causes the icon to light up completely.

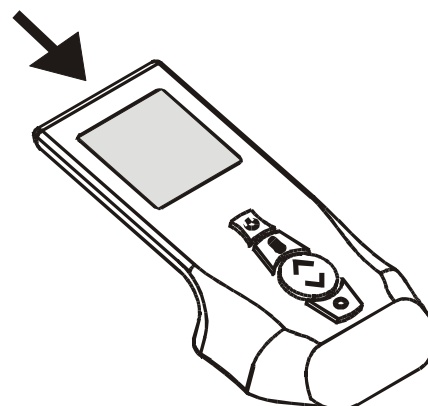
### 4.4.2. General characteristics of the LCD remote control

The stoves which are equipped with the **ACTIVE SYSTEM** combustion control device are controlled mainly by a remote control or in an emergency from the small rear panel.

The LCD remote control lets you take full advantage of all the features of the stove, adjust all operating parameters, set the timer, but most of all to continuously monitor the room temperature so as to suitable control the stove's operation.

In fact, the temperature sensor is built right into the remote control. This allows more precise measurement of the temperature in the room to be heated wherever the user wants, and without the inconvenience and limitations of wired thermostats.

The remote control has back-lighting which is activated by simply pressing a key.



Position of the room temperature probe



**Keep the remote control away from direct heat and water.**

**It is advisable to keep it out of the reach of children.**

**The remote control should always be kept near the stove (within a radius of 5 m) so that correct room temperature values are transmitted. If the stove does not receive any input from the remote control for at least three hours, it will start emitting periodic acoustic signals to inform the user that the remote control is too far away or that the batteries are dead. The display of the emergency panel will show the alarm A10. In this alarm condition, the stove will continue working. To eliminate the alarm, just move the remote control nearer to restore normal operating conditions.**

### 4.4.3. Type of batteries and replacement

The batteries are housed in the lower part of the device at the support base.

Operation requires **3 AAA batteries 1.5 V**.

Via icon **no. 4**, the remote control informs the user when the batteries are nearly dead. If the icon showing an empty battery appears, it means that the batteries are nearly dead and that the remote control is about to shut off.



Dead battery indicator



**If the remote control shuts off due to dead batteries, the stove can only be controlled from the rear emergency panel (see paragraph 4.5). Only a few essential functions remain active during emergency operation: power on, power off and manual adjustment of three levels of power.**



**The batteries provided have a limited lifespan to allow first lighting of the stove and for the user to learn how to use the device.**

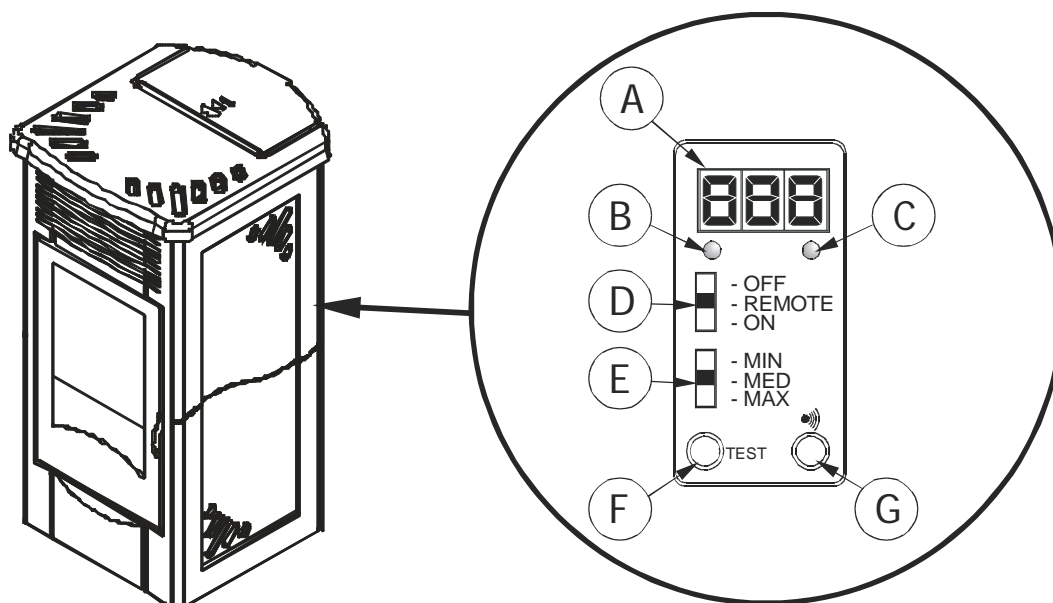
**It is advisable to replace the batteries after the first lighting. It is also advisable to keep a stock of reserve batteries in the home.**



**When replacing the batteries, ensure correct polarity by observing the symbols on the internal compartment of the remote control.**

### 4.5. EMERGENCY PANEL

At the right rear of the stove, there is an emergency panel. It was designed to diagnose any operating anomalies. It is also used to control the stove if the remote control is not working.



## KEY

<p>A. Three figure display which indicates a series of information about the stove, as well as the identification code for any operating anomaly.</p> <p>B. <b>GREEN</b> LED to indicate:</p> <ul style="list-style-type: none"> <li>• OFF = Stove off</li> <li>• FLASHING = Stove in lighting phase</li> <li>• ON STEADY = Stove on</li> </ul> <p>C. <b>RED</b> LED to indicate:</p> <ul style="list-style-type: none"> <li>• OFF = Stove on</li> <li>• FLASHING SLOWLY = Stove shutting down</li> <li>• FLASHING RAPIDLY = Stove in alarm status (accompanied for 10 minutes by a beep)</li> <li>• ON STEADY = Stove off</li> </ul>	<p>D. Three-position selector for function</p> <ul style="list-style-type: none"> <li>• OFF = Stove shut off manually in absence of remote control</li> <li>• REMOTE = Stove can be controlled <b>only</b> by remote control</li> <li>• ON = Stove turned on manually in absence of remote control</li> </ul> <p>E. Three-position selector for selection of power</p> <ul style="list-style-type: none"> <li>• MIN = Selector to run the stove at minimum power with no remote control and with selector <b>4</b> in ON position</li> <li>• MED = Selector to run the stove at medium power with no remote control and with selector in ON position</li> <li>• MAX = Selector to run the stove at maximum power with no remote control and with selector in ON position</li> </ul> <p>F. Push button for diagnostics of stove operating status</p> <p>G. button to connect the stove to a new remote control (by means of a procedure explained below)</p>
---	---

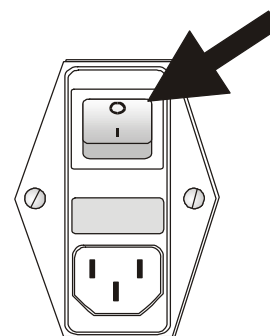


**TO OPERATE THE STOVE WITH THE REMOTE CONTROL, SELECTOR "D" MUST BE PLACED ON "REMOTE"**

## 4.6. SETTINGS TO CARRY OUT BEFORE FIRST LIGHTING

Once the power cord is connected to the rear part of the stove, place the switch, also on the rear, to position **(I)**.

The lighted button will come on and also LED **C** of the emergency panel will come on steady red.



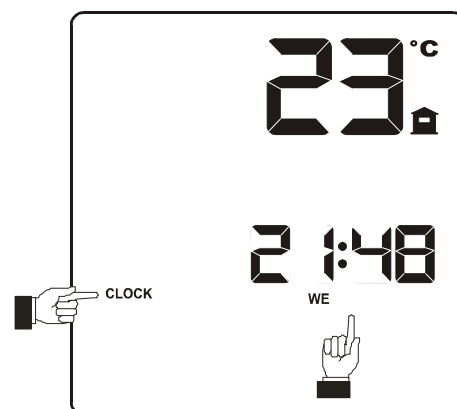
### 4.6.1. Setting current day and time

Simultaneously press buttons **4** and **6** of the remote control **for 5 seconds** with the stove on to access the menu for setting current day and time.

When the message **"CLOCK"** appears it is possible to use button **5** to select the current hour and confirm it with button **6**, then the minutes and confirm them with button **6** and then the day. Upon completion, press key **6** to confirm and exit the menu.

The following abbreviations are used for the days of the week:

**MO** = Monday →  
**TU** = Tuesday →  
**WE** = Wednesday →  
**TH** = Thursday →  
**FR** = Friday →  
**SA** = Saturday →  
**SU** = Sunday →



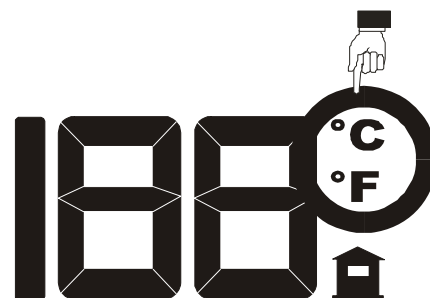
**If the keypad is not touched for 7 seconds, the remote control will automatically exit time setting mode and will confirm the last data inserted.**

### 4.6.2. Setting the temperature unit of measure

The temperature unit of measure can be set to either Fahrenheit or Celsius.

**Only with the stove off**, press button **4** for at least **5 seconds** to select the unit of temperature measurement, either Celsius (°C) or Fahrenheit (°F).

**The default setting of the remote control is degrees Celsius (°C)**



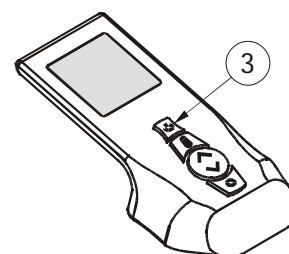
## 4.7. FIRST LIGHTING

### 4.7.1. Turning on/off from the remote control

The stove -- and as a result the display of the remote control -- is turned on and off by **pressing key 3 on the remote control for 2 seconds**.

**After a start-up phase that lasts about 15 minutes, the stove will come up to full operating power.**

After the stove is shut down by pressing button **3**, the cooling-off procedure begins. This includes interruption fuel loading, cleaning of the grate continuation of ventilation until the stove is sufficiently cold. This phase may last from 20 to 40 minutes depending on how long the stove was lit and where it is located.



### 4.7.2. Note on first ignition



**The first attempt at ignition may not be successful, since the feeder screw is empty and it is not always able to fill the grate with required amount of pellets in time to ensure normal ignition**



**CANCEL THE ALARM CONDITION FROM THE EMERGENCY PANEL (see paragraph 4.16), REMOVE PELLETS IN THE GRATE AND REPEAT LIGHTING**

After repeated attempts at lighting, if there is no flame even though pellets are flowing normally, check that the grate is correctly positioned. It must be **placed where it adheres perfectly to its housing and free of any ash incrustations**. If after this check no abnormalities are found, it means that there may be a problem with the stove components or that installation may not have been carried out correctly.



**REMOVE THE PELLETS FROM THE BURNER AND CONTACT AN AUTHORISED MCZ TECHNICIAN.**

### 4.7.3. Start-up/shutdown from emergency panel

If the remote control is defective or the batteries are dead, you can temporarily run the stove from the rear emergency panel.

In this configuration, the stove can operate only in manual mode and with possibility to select from **3** levels of power.

- **LIGHTING THE STOVE WITHOUT THE REMOTE CONTROL**

To light the stove, place selector **"D"** to **ON**. At start-up the red LED goes off and the green LED will start flashing until the start-up phase is complete. At full operating power the green LED will come on steady.

- **SELECTING POWER WITHOUT REMOTE CONTROL**

You can choose from three levels of heating power:

**MIN-MED-MAX** (selector **"E"**)

**MINIMA** power is the 1st power;

**MEDIUM** power is the 2nd power;

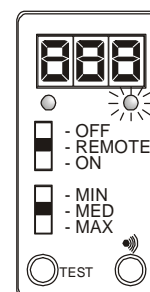
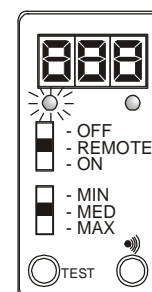
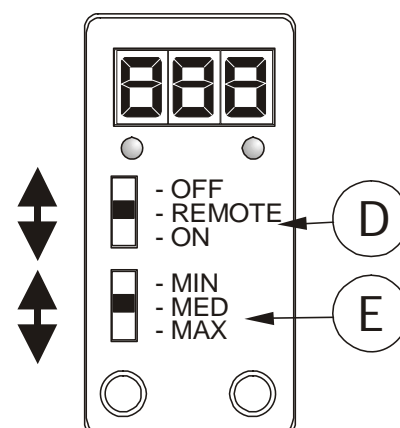
**MAXIMUM** power is the 3rd power;

- **SHUTTING DOWN THE STOVE WITHOUT THE REMOTE CONTROL**

To shut down the stove, place selector **"D"** to **OFF**.



**Once the remote control is working again, remember to put selector "D" back in the "REMOTE" position. Otherwise the stove will disregard inputs from the remote control.**



## 4.8. OPERATING MODE

Stoves have two operating modes: **MANUAL** and **AUTOMATIC**.

### 4.8.1. Manual and automatic

The stove can operate in one of these two different operating modes.

**MANUAL** mode allows only adjustment of the flame from power 1 to power 5, ignoring any ambient temperature measurement. This mode is indicated by the message **MAN** on the display of the remote control (icon 1)

**AUTOMATIC** mode, on the other hand, lets you set the desired temperature in the room of installation. The stove will control its power autonomously in order to reach and maintain the established temperature in the room. This mode is indicated by the message **AUTO** on the display of the remote control (icon 1)

With this mode you can also use an advanced function called **ECOSTOP** which is described later (paragraph 4.8.4.)

To choose the mode, press button **4**



**At each lighting, the stove automatically sets to the operating mode that it was in the last time it shut down.**

### 4.8.2. Manual mode

In this mode you can only vary the thermal power provided by choosing the flame power.

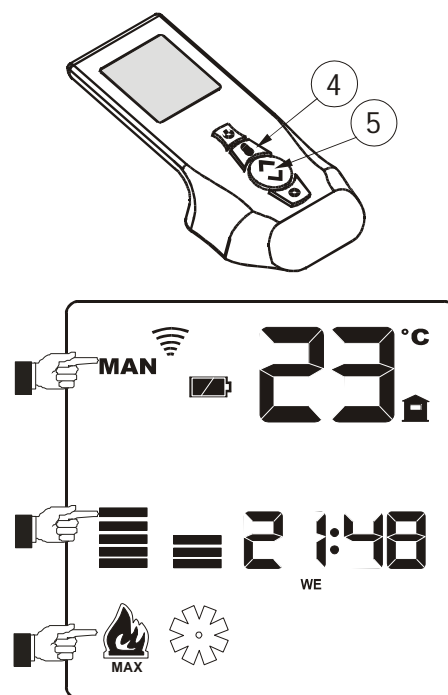
Button **4** of the remote control is used to select **MANUAL** mode. On the display this is indicated by the message **MAN** and the flame symbol. In this mode, button **5** is used to adjust the 5 heating powers of the stove.

Press the upper part of button **5** to increase power. Press the lower part to decrease power. This variation is indicated by the bars located above the flame symbol. Upon reaching the 5th power level, the message **MAX** appears under the flame symbol. This indicates that maximum performance of the stove has been reached.

**In this operating mode, the flame symbol is completely on.**

#### 4.8.2.1. Changing from manual to automatic mode

To change from **MANUAL** to **AUTOMATIC** operating mode, just press the button **no. 4**. The message **MAN** will go off and the message **AUTO** will come on. The flame power indicators and the flame icon will disappear. The numerals will come on for setting the desired temperature (icon 8)



### 4.8.3. Automatic mode

Whereas **MANUAL** mode lets you simply choose the thermal power provided with no variation of operation over time, **AUTOMATIC** mode lets you set a temperature to be reached in the room. In this operating mode the stove will automatically vary the thermal power provided so as to keep the temperature in the room constantly at the set value.

Press button **4** on the remote control to select **AUTOMATIC** mode. This will be shown on the display by the message **AUTO**. In this mode, by pressing button **5**, only the desired room temperature is adjusted.

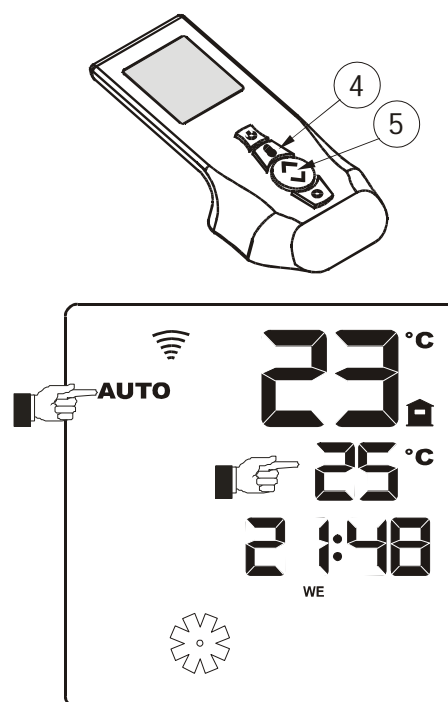
Press the upper part of button **5** to increase the selected temperature. Press the lower part to decrease the temperature. The desired temperature is indicated by the figures in icon no. 8

The remote control regulates the operation of the stove by constantly comparing the room temperature (indicated at upper right on the display and specifically the larger figures with the cassette symbol near them) with the temperature set by the user.

Upon reaching the desired temperature in the room, the stove will gradually go to minimum power. If instead the room temperature drops below the set limit, the stove will gradually come back up to maximum hearing performance.

Room temperature is measured by the remote control via a sensor inside of it. Therefore, the stove will always attempt to reach the temperature based on the measurements of the remote control sensor.

**Thanks to this characteristic, the remote control can be considered a mobile external thermostat, with a range of about 5 m (with batteries charged)**



Since the remote control acts as an external thermostat, it is necessary to for the remote control and the stove to communicate with each other. It is therefore suggested to keep it in the same room as the stove, within a radius of 8 metres, but not so close that it will be affected by the heat from the stove.

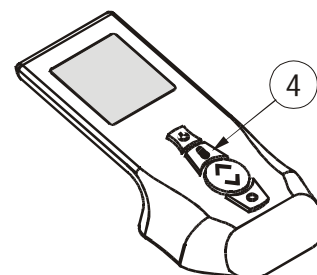


It is advisable to keep the remote control in the room where the stove is installed so that the stove and remote control can communicate with each other.

If the remote control is moved out of range from the stove, the stove will no longer have any temperature feedback. It will therefore continue operating in the same manner as was set by the last transmission from the remote control.

#### 4.8.3.1. Changing from automatic to manual mode

To change from **MANUAL** to **AUTOMATIC** mode, press button **4** so that the remote control display shows the message **MAN** and the bars for the adjustment of flame power.



#### 4.8.4. Automatic mode with ECO-STOP

This mode changes stove operation in **automatic mode**. Upon reaching the temperature set by the user, the stove goes to power 1 for a short period of time. Then, if the temperature remains constant and above the set temperature, it shuts down. The stove comes back on automatically only when the room requires heat again, but not before a period of time has passed for the stove to cool off. This option is advisable only if the stove works in highly insulated rooms or where there is low heat dispersion over time.

##### Example of operation in ECOSTOP mode

If the room temperature detected by the sensor of the remote control is 15°C and the set temperature is 20°C, the stove will follow a pre-established ramp up to the 5<sup>th</sup> power. Once 20°C is reached, it goes into standby mode. When the room temperature drops below the value set on the remote control (for example 18°C) and a sufficient shutdown time has elapsed, the stove will come back on automatically and continue running until again reaching 20°C. If the temperature read by the sensor in the remote control remains above the value set on the thermostat (for example 20-21°C) the stove will remain off.

In this mode, lighting can be carried out by the user by resetting the thermostat temperature to a value greater than that in the room, or by shutting down the stove by pressing button **3** for a few seconds and then pressing the same button to re-light the stove.

The **"ECO STOP"** mode does not need to be reset as it remains in memory from the last use.

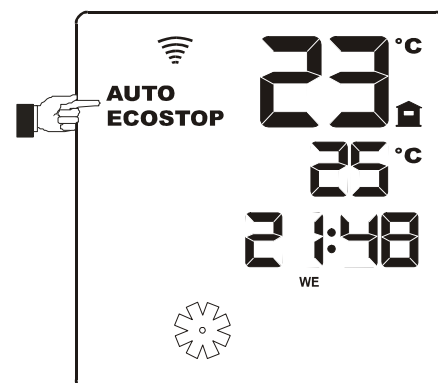
#### 4.8.4.1. Activation /de-activation of ECO-STOP mode

This mode makes it possible to optimize stove consumption in well-insulated rooms.

This operation can be selected whether your are in manual or automatic mode by pressing and holding button **4 for 5 seconds**.

The display of the remote control will show the message **AUTO** along with the message **ECOSTOP**.

To disable the ECO-STOP function follow the same procedure.



## 4.9. HOT AIR VENTILATION

The stoves are equipped with an internal fan for expulsion of heating air. It can be set to 5 different speeds at any time regardless of the whether the stove is in manual or automatic mode.

To access the fan setting menu, press the button **MENU 6** once and the icon for ventilation **will come on completely**. In fact, normally only the border of the symbol appears, since to access adjustment it is necessary to access the corresponding menu.

**5** speeds can be selected as well as an automatic function.

To select the speed, after pressing button **6**, press button **5** up or down to increase or decrease ventilation power. Variation of ventilation can be seen by the number of bars above the fan symbol which will increase or decrease as a result.

In addition to **5th speed** there is an additional selection called **AUTO** function. This function lets you connect the fan speed to the flame power. With this option selected, the stove will independently select the fan speed based on the flame power.

This option can be selected simply by again pressing the up arrow button of button **5** once you are at the 5th ventilation speed. The display of the remote control will show the message **AUTO** under the fan symbol.

### Example with ventilation set to AUTO:

If the flame is at power 3, the fan will automatically set to power 3. If the flame is at power 5, the fan will automatically set to power 5, and so on.



**If the keypad is not touched for 7 seconds, the remote control will automatically exit fan setting mode and will confirm the last inserted setting.**



**In selecting the fan speed, it is advisable not to select very low speeds (1st or 2nd) when the stove is at maximum power as this may cause the structure to overheat.**

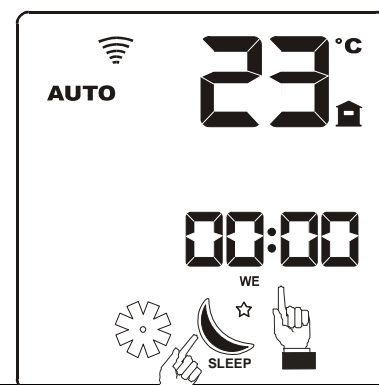
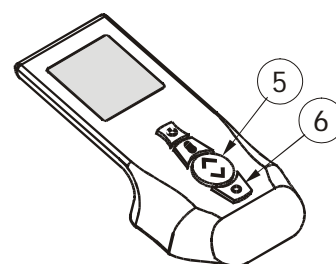
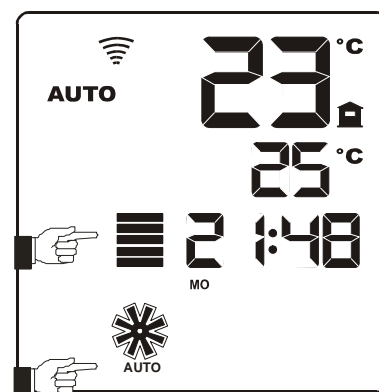
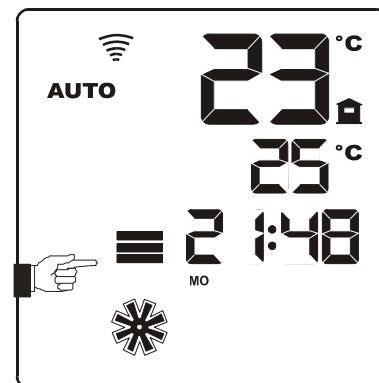
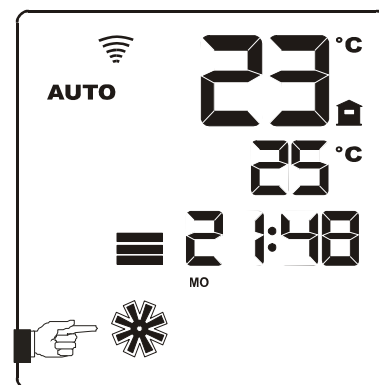
## 4.10. SLEEP FUNCTION

The purpose of this function is to make it faster to select a programmed shutdown, without the need to programme the stove's internal timer.

To explain the **SLEEP** function in simple terms, it might be said that it allows the user to set a countdown starting from a **minimum of 15 minutes up to a maximum of 8 hours**, after which the stove will shut off.

To set the function, press the MENU button **6** twice so that the icon comes on completely.

Where the time is normally shown, **00:00** appears and it is possible to choose the amount of time using button **5**. Press the up arrow to increase the time in steps of 15 minutes. Press the arrow down to decrease the time in steps of 15 minutes. To confirm, press key **6** again or wait 7 seconds.




After returning to normal operation, instead of showing the current time, the display will show the countdown of time remaining to shutdown.



**If the keypad is not touched for 7 seconds, the remote control will automatically exit fan setting mode and will confirm the last inserted setting.**

## 4.11. TIMER

This operating mode, indicated by the symbol  on the display, allows programming of automatic start-up or shutdown of the stove.

**Normally, the stoves have the PROGRAMMED mode deactivated.**

The basic settings in PROGRAMMED mode are:

- **Clock**
- **Current day**
- **Selection of weekly / daily programme**

### 4.11.1. Current date and clock

See *paragraph 4.6.1. and 4.6.2.* to learn how to set the current date and time.

The days of the week are shown on the remote control with the following abbreviations:

**MO** = Monday →  
**TU** = Tuesday →  
**WE** = Wednesday →  
**TH** = Thursday →  
**FR** = Friday →  
**SA** = Saturday →  
**SU** = Sunday →



**Setting the current date and time is essential for proper timer operation.**

### 4.11.2. TIMER activation and selection of a programme.

#### SETTING OF A WEEKLY PROGRAMME

An explanation will now be provided of how **to activate the TIMER function selecting a daily or weekly programme:**

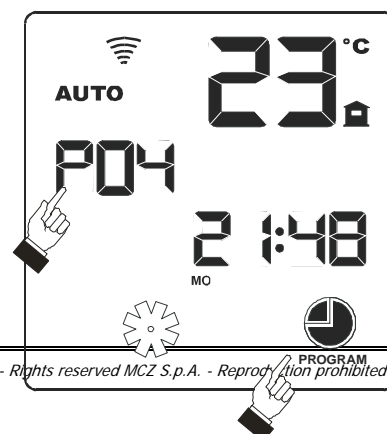
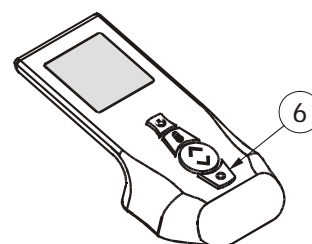
press button **6** several times until the clock icon comes on:



**PROGRAM**

then use button **5** to select from **10 pre-set weekly programmes** in the remote control.

Select from the tables in *paragraph 4.12.* the programme that best suits the heating needs of your home and memorize the programme



number on the remote control. If none of the 10 pre-set programmes meets your personal heating needs, you can put together a personalized weekly programme (**P99**) that suits you best (see next paragraph).



**If the keypad is not touched for 7 seconds, the remote control will automatically exit timer setting mode and will confirm the last inserted setting.**

Immediately after choosing the desired timer programme and confirming it with key **6**, you will exit the setting the menu and the timer icon will remain on the display of the remote control with this format:



If this icon remains on the display, it means that a timer programme is active that includes start-ups and shutdowns over the course of a day or week.



**ATTENTION!**

**If the timer function is active, the icon ⌚ will be on in any operating screen**

**The TIMER function can be activated/deactivated whether the stove is on or off.**

**SETTING OF A PERSONALIZED PROGRAMME**

If one of the pre-set weekly programmes does not suit the heating needs for your home, you can choose and combine various daily programmes included in the memory of the remote control to create a personalized weekly programme (called P99).

**50 daily programmes can be selected , and you can select a different programme for each day of the week.**

To activate this option, proceed as described above for setting a weekly programme, but instead of selecting one of the programmes contained in the table of the weekly programmes (**from P01 to P10**) select the programme **P99**.

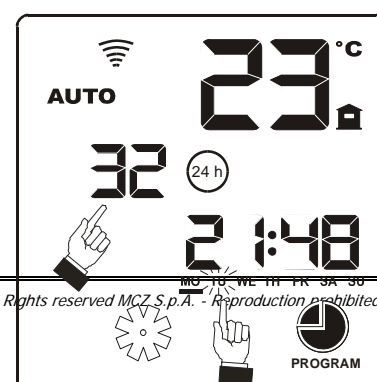
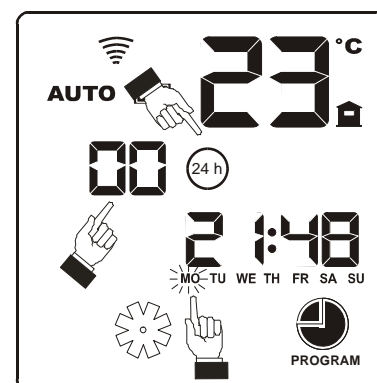
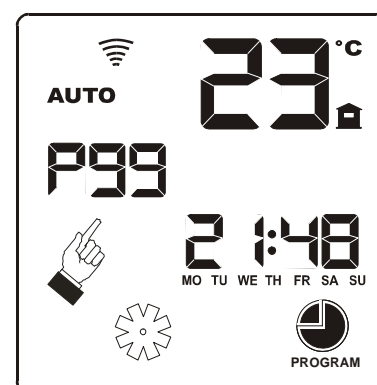
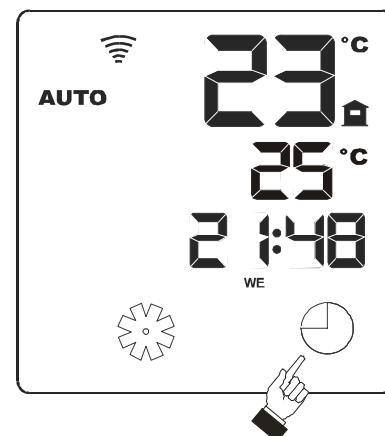
Once you have selected programme **P99** press push button **4** to enter daily programming mode. The first day of the week will start flashing (**MO** = Monday).

Use key **5** to scroll the programmes from **01** to **50** and select the desired one, after consulting the table in *paragraph 4.12*. When you carry out this type of programming, you will notice that the **24 h** icon also lights up to show that daily rather than weekly programming is being performed.

Once the desired programme has been selected for the active day (E.g.: **32** for the day **MO** = Monday), again pres button **4** to proceed with programming of the day **TU** = Tuesday). Notice that as soon as the day **MO** = Monday is confirmed, under **MO** a dash appears to indicate that a daily programme is active for that day.

As soon as you confirm the programme for one day of the week and go to the next day, the remote control will make selection faster by proposing the last set programme (in this example **32**) but with button **5** you can change it with another.

Proceed with this programming mode until the day **SU** = Sunday



**If for a given day of the week you do not want to set any programme, select programme 00 and continue with programming. Notice that under that day there is no dash.**

Upon completion of programming, **press button 6 or wait 30 seconds** and the remote control will automatically exit the menu, confirming the selections you have made.



**If a timer programme is active but the user decides to start/stop the stove in advance, the command given by the user overrides the timer and is carried out. The next command from the timer is obviously disregarded.**

**Example: if the timer calls for the stove to be started up at 10:00 but the user decides to start it at 9:00, by pressing button 5 the stove will come on. At 10:00, the timer, which was to order start-up, will be disregarded.**




### **IMPORTANT NOTE**



It takes 10 to 15 minutes for the stove to start up, and another 10 to 15 minutes before sufficiently hot air comes out.

Take this into account when setting the start time. Likewise, stove shutdown requires about 30 minutes, during which the heat stored up by the stove is released into the room. Keep this in mind for substantial fuel savings.

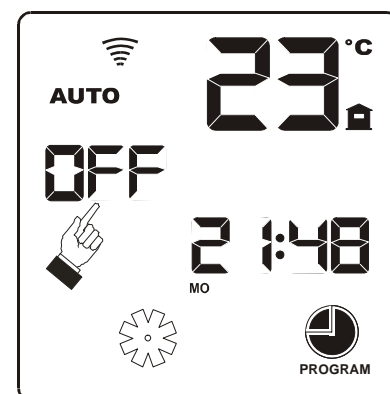
#### **4.11.3. TIMER de-activation.**

To de-activate the timer, access the menu again by means of button **6** until the icon  appears, then use button **5** to select:

**OFF**

Then wait **7 seconds** for confirmation or again press button **6** to confirm.

This de-activates the TIMER.



#### **4.12. PRE-SET WEEKLY AND DAILY PROGRAMMES**

##### **4.12.1. Weekly programmes**

The weekly programmes selected by MCZ and stored in the memory of the remote control were designed to meet the needs of most users who are out of the home during working hours (factory workers, shopkeepers, office workers, shift workers) as well as those who are usually at home (homemakers, senior citizens, etc.).

Also, programming has been provided for those who use the stove in a weekend home (e.g. a home in the mountains) and want to find the home warm when they get there.

If you have even more specific needs which are not met by any of these weekly programmes, you can customize weekly programme P99

using seven different programmes for each single day of the week (*see chapter 4.11.2*).

PROGRAMME			HOURS																								
No.	TYPE OF PROGRAMME	DAYS	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	0.00
P01	HOMEMAKER	Mo-Fr																									
		Sa- Su																									
P02	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P03	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P04	SHIFT WORKER	Mo-Fr																									
		Sa- Su																									
P05	SHOPKEEPER	Mo-Sa																									
		Su																									
P06	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P07	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P08	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P09	FACTORY OR OFFICE WORKER	Mo-Fr																									
		Sa- Su																									
P10	WEEKEND	Fr																									
		Sa- Su																									

### 4.12.2. Daily programmes

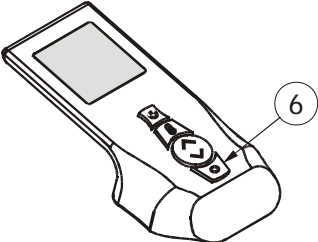
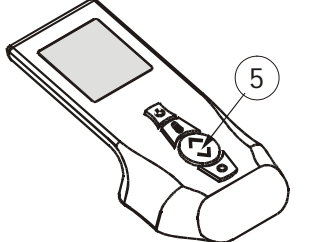
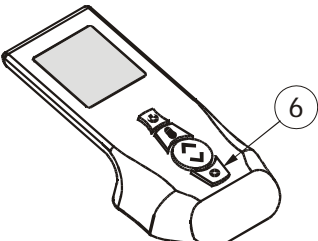
PROGR.	HOURS																								
No.	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	0.00
00																									
01																									
02																									
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
32																									
33																									
34																									
35																									
36																									
37																									
38																									
39																									
40																									
41																									
42																									
43																									
44																									
45																									
46																									
47																									
48																									
49																									
50																									

## 4.13. PRACTICAL EXAMPLE OF WEEKLY/DAILY PROGRAMMING

### 4.13.1. Setting of a weekly programme

Let's take the example of a normal factory or office worker who starts work at 8:00, comes home for lunch at 12:30 and goes back to work from 14:00 until 18:00.

Among the programmes in the remote control, there is one which best suits the times when the user is in the home. It is **P07** (see table in paragraph 4.12.1). This is how to set it:

PHASE 1	PHASE 2
	
<p>press button <b>6</b> several times until the clock icon is completely lit.</p>	<p>Press button <b>5</b> up to programme <b>P07</b> which was previously selected.</p>
PHASE 3	SUMMARY
	<ol style="list-style-type: none"> <li>1. Press button <b>6</b> until the clock icon appears</li> <li>2. Select the programme with button <b>5</b></li> <li>3. Confirm the programme with button <b>6</b> or wait 30 seconds, after which the remote control will automatically confirm the selection made and will exit programming.</li> <li>4. The empty timer icon will remain visible. This means that the programme is set and that from that moment the stove will start and stop on its own.</li> </ol>
<p>Confirm the selection by pressing button <b>6</b> or wait 30 seconds. The programme is confirmed, the clock icon goes off, only the borders remain visible, and the LED's that indicated the selected programme go off.</p>	

### 4.13.2. Setting of a daily programme

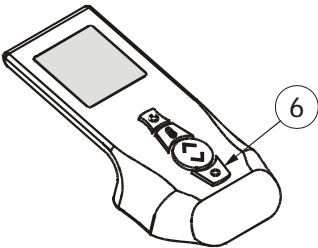
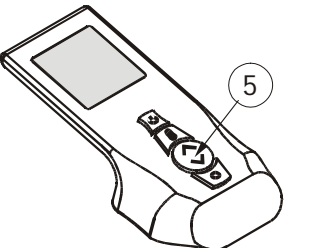
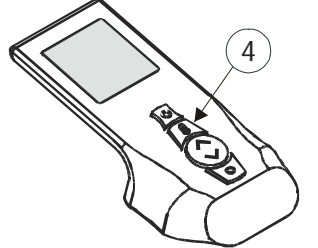
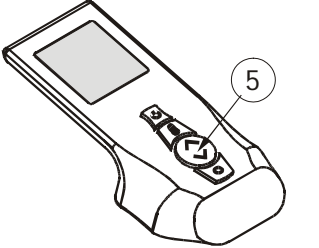
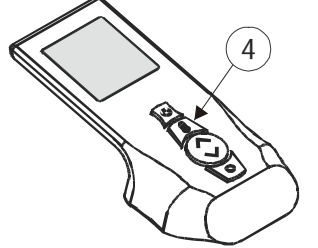
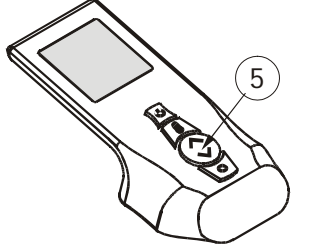
Let's look at a user who does not have regular daily hours (a free-lance worker, for example), but who generally expects to be at home at the following times:

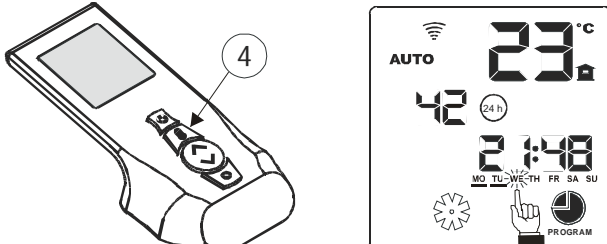
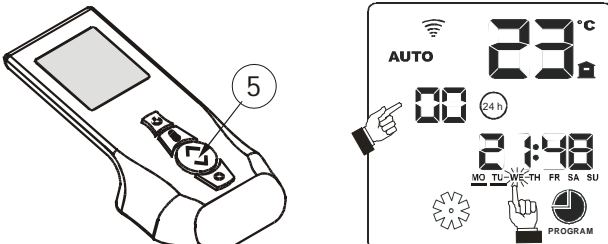
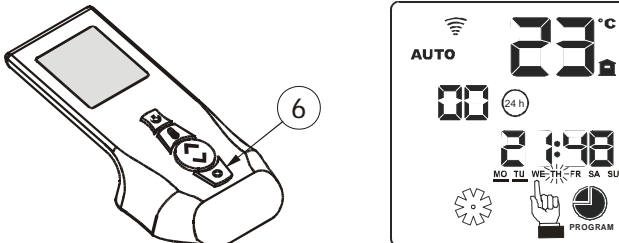
- MONDAY → home until 10:00 and from 17:00 on
- TUESDAY → home until 8:00 and from 14:00 on
- WEDNESDAY → at home all day and does not wish to set any programme
- THURSDAY → at home all day
- FRIDAY → at home until 9:00, from 12:00 to 15:00 and from 18:00 on
- SATURDAY → at home only after 18:00
- SUNDAY → at home only after 14:00

Based on these times, from the table in paragraph 4.12.2 the daily programmes are selected which best suit this routine.

- MONDAY → Programme **20**
- TUESDAY → Programme **42**
- WEDNESDAY → Programme **00**
- THURSDAY → Programme **13**
- FRIDAY → Programme **33**
- SATURDAY → Programme **10**
- SUNDAY → Programme **08**

**START OF PROGRAMMING: MONDAY**

PHASE 1	PHASE 2
	
<p>press button <b>6</b> several times until the clock icon is completely lit.</p>	<p>Press button <b>5</b> up to select programme <b>P99</b>.</p>
PHASE 3	PHASE 4
	
<p>Press button <b>4</b> to confirm entry into daily programming mode. The <b>24 h</b> icon will come on and the message <b>MO</b>=Monday will start flashing</p>	<p>Press button <b>5</b> up to select programme <b>20</b> (selected for Monday).</p>
PHASE 5	PHASE 6
	
<p>Press button <b>4</b> to confirm the programme set for <b>MO</b>= Monday and start programming of the day <b>TU</b>= Tuesday. When the button is pressed, the dash lights up under the symbol <b>MO</b>= Monday and the symbol <b>TU</b> = Tuesday starts flashing. The dash shows that a timer programme has been set for that day.</p>	<p>After pressing button <b>4</b> to confirm programming for <b>MO</b>=Monday and move on to <b>TU</b>=Tuesday, the remote control will propose the same programme as for Monday, in case the user wants to set the same programme for Tuesday. If instead the programme for Monday is not acceptable for Tuesday, just press button <b>5</b> to change it. In fact, in the example, the Monday programme is not suitable for Tuesday, because you need to select programme <b>42</b>. Therefore, press button <b>5</b> to change it.</p>

PHASE 7	PHASE 8
	
<p>After selecting programme <b>42</b> for <b>TU</b>=Tuesday, confirm this choice with button <b>4</b> to go on to the programming of <b>WE</b>= Wednesday. As before, a dash will light up under <b>TU</b>=Tuesday and the symbol <b>WE</b>=Wednesday will start flashing.</p>	<p>For <b>WE</b>=Wednesday, no programme is desired. Therefore, as in the other cases, it is enough to use button <b>5</b> to select programme <b>00</b> and then confirm the selection with button <b>4</b>.</p>
PHASE 9	PHASE 10 CONCLUSION
	<p>To conclude programming for the remaining days of Thursday, Friday, Saturday and Sunday, proceed as for Monday, Tuesday and Wednesday. The only difference is the programme number which is selected with button <b>5</b>.</p> <p>Upon completion of programming of all days, when you come to <b>SU</b>=Sunday, press button <b>6</b> to exit programming. You can also wait <b>30 seconds</b> and the remote control will automatically exit programming, confirming all settings made. For a quick check of programming, look to see whether there are dashes under the symbols of the week, or you can go back to programming with button <b>6</b>, re-select programme <b>P99</b> with key <b>5</b>, and then, still using button <b>6</b>, scroll all the days of the week to check which programme has been set.</p>
<p>Since no programme has been set for <b>WE</b>=Wednesday (it was decided to select <b>00</b>), you will note that programming moves to <b>TH</b>=Thursday but that under the symbol <b>WE</b>=Wednesday there is no dash. This means that for that day, no timer programme has been set.</p>	

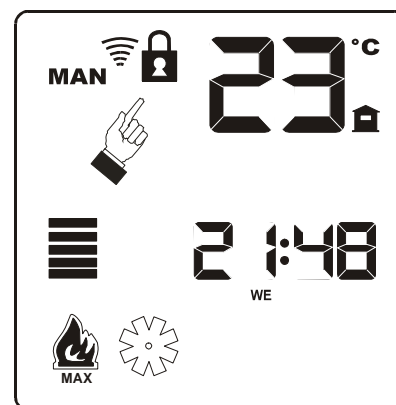
#### 4.14. INSERTION OF KEYPAD LOCK

The remote control is equipped with a function that makes it possible to lock the keypad, so that keys cannot be pressed accidentally or the remote control cannot be used by a child.

This lock is activated simply by press button **6** for **5 seconds**.

After that time, a lock symbol will appear at the upper left of the display to confirm that the keys are locked.

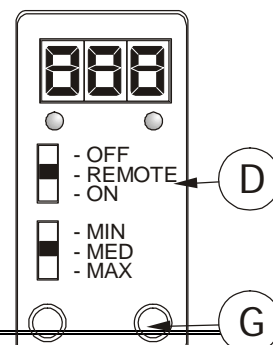
To deactivate the lock, repeat the operation described above.



#### 4.15. REPLACEMENT OF REMOTE CONTROL

If the remote control is replaced with a new one, the new remote control will need to be recognized by the stove. This is done as follows:

Check that selector **D** in the emergency panel is in the **REMOTE** position. Press button **G** and **within 10 seconds** press any button on the new remote control.



## 4.16. SAFETY DEVICES

The stove is fitted with the following safety devices:

- **PRESSURE SWITCH**

Monitors depression in the smoke duct. It is designed to shut down the pellet feed screw in the event of an obstructed flue or significant back-pressure (from the wind).

- **SMOKE TEMPERATURE SENSOR.**

Monitors the temperature of the smoke, and gives permission for start-up or shuts the stove down when the smoke temperature falls below the preset value.

- **PELLET HOPPER TEMPERATURE SENSOR.**

If the temperature exceeds the preset safety level, it immediately shuts down the running of the stove, and has to be reset manually, after the stove has cooled, before the it will restart.

- **ELECTRICAL SAFETY**

The stove is protected against violent surges of current by the main fuse, which is located on the control panel at the rear of the stove. Other fuses to protect the electronic boards are to be found on the boards themselves.

- **FAILURE OF THE SMOKE EXTRACTION FAN**

If the fan stops, the electronic board shuts off the supply of pellets in good time, and an alarm is displayed.

- **BREAKDOWN OF THE REDUCTION MOTOR**

If the reduction motor stops, the stove continues to function until it has cooled down to the minimum level.

- **TEMPORARY POWER OUTAGE**

If there is a power outage during operation, when the power comes back on the stove will go into cooling mode and then it will come back on automatically.

- **FAILURE TO LIGHT**

If during ignition no flame develops, the stove will go into alarm condition.



### **TAMPERING WITH THE SAFETY DEVICES IS PROHIBITED**



It is only after eliminating the cause which gave rise to the intervention of the safety system, that it is possible to relight the stove and thus reset the automatic operation of the sensor. To understand which anomaly has occurred, consult this manual at paragraph 4.17 which explains what to do based on the alarm message the stove displays.



## ATTENTION

**If the stove is not used as described in this instruction booklet, the manufacturer refuses to accept any responsibility for damage to persons and property that may arise. The manufacturer furthermore refuses to accept responsibility for damage to persons and property arising from the failure to observe all the rules contained in the manual and in particular:**

- **Failure when carrying out works of maintenance, cleaning and repair to adopt all necessary measures and precautions**
- **Tampering with the safety devices.**
- **Removing the safety devices.**
- **Failure to connect the stove to an efficient system for the discharge of smoke.**
- **Failure to check in advance that the room where the stove is to be installed is adequately ventilated.**

### 4.17. ALARM SIGNALLING

If there is an operating anomaly, the stove goes into alarm shutdown mode and informs the user of the type of problem that has occurred via a 3-figure code displayed on the rear emergency panel.

The alarm is permanently signalled by the corresponding 3-figure code, by a flashing red light on the emergency panel, and, for the first ten minutes of the alarm, by a periodic acoustic signal. To take the stove out of alarm conditions and restore its normal operation, read the instructions in the next two paragraphs.

The following table summarizes the possible alarms which the stove may signal and corresponding code which appears on the emergency panel.

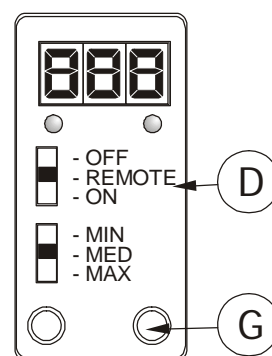
MESSAGE ON DISPLAY	TYPE OF PROBLEM	SOLUTION
<b>A01</b>	Fire fails to ignite	Check the level of pellets in the hopper. Check that the grate is properly inserted in its housing and does not have any obvious unburnt incrustations; Check whether the ignition plug heats.
<b>A02</b>	Fire extinguishes abnormally	This is because the fire goes out due to lack of fuel (hopper empty) or by an excess of pellets in the grate which suffocates the flame.
<b>A03</b>	Pellet hopper temperature exceeds required safety limit. Overheating of the stove body	The air fan may be damaged or stopped, and is not able to cool the structure.
<b>A04</b>	The temperature of the smoke discharge has exceeded pre-set safety limits	The stove will shut off automatically. Let the stove cool off for a few minutes, then re-light it. Check smoke release and position of the temperature probe. Check the type of pellet being used.
<b>A05</b>	The pressure switch has tripped due to obstruction of the flue pipe caused by foreign objects, soot/ashes or atmospheric agents (wind, snow, etc.)	Check and clean the WHOLE flue system Protect the outlet from the wind.

MESSAGE ON DISPLAY	TYPE OF PROBLEM	SOLUTION
<b>A06</b>	The smoke extractor is not able to provide the primary air required for combustion.	Draught difficulties or clogging of grate. Check whether the grate is clogged by incrustation and clean as required. Check and clean flue system as necessary
<b>A07</b>	During operation of the stove, superfluous air is getting into the combustion chamber	Caused by prolonged opening of the fire door or by substantial air infiltration (ash drawer missing or smoke fan inspection plug missing)
<b>A08</b>	The smoke extractor is not running.	Check that the smoke fan compartment is clean and if it is dirt that is blocking it. Smoke fan failure. Replacement
<b>A09</b>	The smoke probe is defective and does not properly measure the temperature of the discharge smoke	Contact an authorized service centre to replace the component.
<b>A10</b>	The plug is defective	Contact an authorized service centre to replace the component.
<b>A11</b>	The reduction motor for feeding pellets to the grate has failed	Contact an authorized service centre to replace the component.
<b>A12</b>	The remote control has been beyond the reception range of the stove for more than three hours, or its batteries are dead. NOTE: only in this case the stove does not go into alarm shutdown, but continues operating in the mode that the remote control set via the last sent command.	Move the remote control back to within range of the stove, or change the batteries if they are dead. As soon as the stove receives a new signal from the stove, the alarm indications will disappear. A easy way to force a transmission to the stove is to press button 4. This changes operating mode from manual to automatic and vice versa.
<b>A13</b>	Generic failure of electronic control unit	Contact an authorized service centre to replace the component.
<b>A13</b>	Generic failure of sensor	Contact an authorized service centre to replace the component.

#### 4.18. Exiting alarm condition

If there is an alarm, to restore normal operation of the stove you will need to follow the procedure outlined below:

- Place selector D of the rear emergency panel in the OFF position for a few seconds until the 3-figure code that identifies the type of alarm disappears. The following operation will also stop the flashing of the red LED and the acoustic alarm signal.
- Place selector D back in the REMOTE position, so that the stove can again be managed by the remote control.
- Turn the remote control off and back on again if you want to restart the stove.





**Only in the event of defect A12 (no communication between remote control and stove), the stove will remain on with the most recently set mode. It will automatically exit alarm mode as soon as it receives a signal from the remote control.**

#### 4.18.1. Mechanical shutdown of the stove

The following things can cause stove shutdown:

- Overheating of the stove body
- High pressure in the outlet fumes (as read by the pressure switch) and therefore possible obstruction of the smoke discharge system or external back-pressure.

Shutdown is signalled on the display accompanied by a beep.

In this situation the shutdown cycle is automatically activated.

Once this process has started, any operation which is an attempt to reset the system is useless.

The cause of the shutdown is shown on the display.

#### WHAT TO DO:

When the stove is cold: If the message **"A03"** appears, it will be necessary to unscrew the cover of the thermostatic sensor fitted to the back of the stove and press the red button to reset it. Refit the protective cover.

If the message **"A05"** appears, check that the **ENTIRE** smoke duct, including the combustion chamber, is clean and free of any obstruction. (it is recommended that this operation be conducted by a specialist MCZ technician).

**Only after the cause of the blockage has been permanently eliminated can a fresh attempt to relight the stove be made.**



Bulb probe reset button



How to reset the bulb thermostat once the stove is cold.

## 5. MAINTENANCE AND CLEANING



### ATTENTION!

**All cleaning of all parts must be carried out with the stove completely cold and unplugged.**

The stove does not need much maintenance if used with certified quality pellets. The necessity for maintenance increases with use and depending on the performance requested of it.



Example of clean grate

### 5.1. DAILY AND WEEKLY CLEANING

#### 5.1.1. Before each lighting

Clean the grate of ash and any incrustation which could obstruct the passage of air.



**REMEMBER THAT ONLY A CLEAN, NEAT GRATE CAN ENSURE PROPER OPERATION OF YOUR PELLET STOVE.**

**A simple visual check, carried out daily, will reveal whether the grate is in good working order.**



Example of dirty grate

For good cleaning of the grate, pull it completely out of its housing and thoroughly clean the grate and holes on the bottom. If you use good-quality pellets, you will normally only need to use a paintbrush to restore the perfect condition of the component. For tough incrustations, use the steel tool provided with the stove.

#### 5.1.2. Check every 2/3 days

Clean and empty the ash drawer, watching out for hot ash.

**Only if the ash is completely cold**, it is possible to use a vacuum cleaner to remove it. Use a drum-type vacuum cleaner that is suitable for picking up particles of a certain size.

Use a small brush to clean the top perforated baffle plate.

Experience, and the quality of the pellets used, will determine the frequency of cleaning.

**It is however advisable not to let it exceed 2 or 3 days.**

When the job is completed, re-close the ash drawers, making sure that they are properly shut.



Cleaning the ash collection compartment

#### 5.1.3. Cleaning the glass

For cleaning the ceramic glass, the use of a dry brush is recommended, or if it is very dirty, the special spray detergent, applying a small quantity then cleaning with a cloth.



### ATTENTION!

**Do not spray the cleaning product on the painted parts or on the gaskets of the fire door (ceramic fibre cord)**



Cleaning the superior deflector

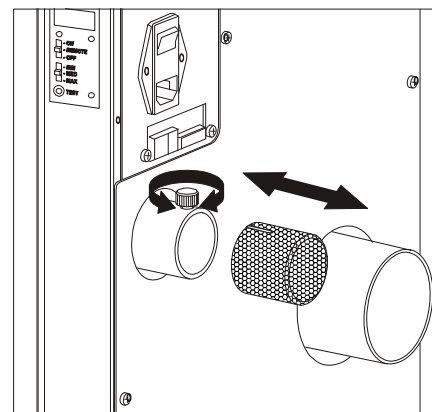
### 5.1.4. Cleaning of the air filter

At the lower part of the stove, where there is the inlet pipe for combustion air Ø 5 cm, at the time of installation of the stove a metal mesh air filter must be inserted to prevent dirt from getting into the motor body and internal sensor.

It is advisable to check every 15/20 days whether the filter is clean. Remove lint or any other material which may have been trapped by the filter.

Checking and cleaning will be required more frequently if there are pets in the home.

For cleaning, just turn the knob that holds the filter on the air intake pipe and remove the filter by turning in the direction indicated by the arrow. Clean it with a brush, damp cloth or compressed air.



Removing the air filter for cleaning



**The filter is made of metallic mesh. It is soft and malleable to the touch. Therefore, when cleaning it, be careful not to crush it or damage it in any other way. If it is broken it must be replaced**



**ATTENTION!**

**Never operate the stove without the air filter. MCZ shall not be held liable for damage to internal components if this instruction is not followed.**

## 5.2. PERIODIC CLEANING

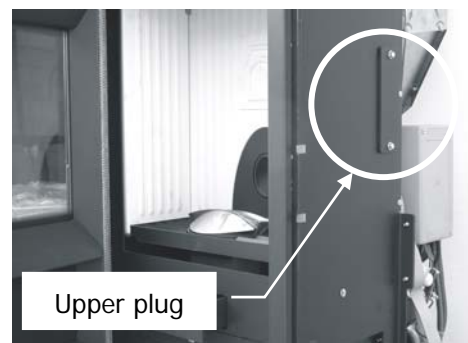
### 5.2.1. Cleaning of the heat exchanger

Open the upper plug (Fig. 29) and use a stiff rod to scrape the walls of the firebox so that the ashes fall to the part below.

Still with the stove cold, open the door below the grate and with a vacuum cleaner remove the ash and soot accumulated in the heat exchanger.

Clean the smoke discharge system, especially in the area of the tee connectors and of any horizontal stretches of pipe.

For information refer to a chimney sweep.



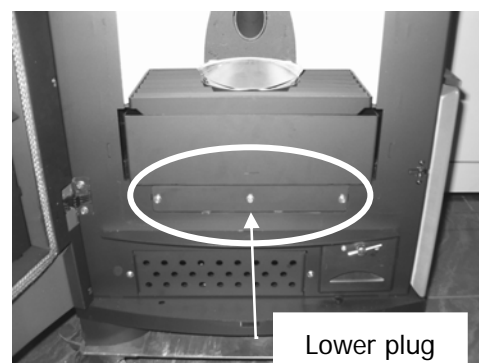
**ATTENTION: For your safety, the frequency of cleaning the smoke discharge system must be determined on the basis of how the stove is used.**

Check the seal of the ceramic fibre gaskets on the stove.

If necessary order new gaskets from your dealer as replacements.

At the end of the season it is necessary to clean the compartment under the grate and the heat exchanger inside it.

This general cleaning should be carried out at the end of the season in order to facilitate the general removal of all residues of combustion, without waiting too long, because with time and humidity these residues can become compacted.





**ATTENTION:**

The frequency with which the smoke discharge system is cleaned should be determined based on the type of use that is made of the stove and the type of installation.

MCZ suggests relying on an authorized service centre for end-of-season cleaning and maintenance, who will carry out all of the previously mentioned work and make a general check of the stove's components.

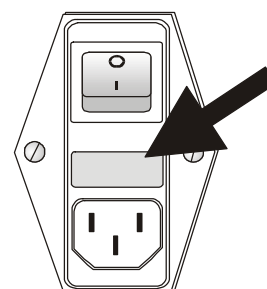
### 5.2.2. Shutting the stove down (end of season)

At the end of season, before shutting down the stove, we recommend completely removing pellets from the hopper with the use of a vacuum cleaner with an extension.

**During periods of disuse, the stove must be unplugged and placed in a dry place protected from the elements. For greater safety, especially if there are children around, we recommend removing the supply cable from the rear of the stove.**

Upon re-start, when pressing the main switch (located on the back of the stove) does not make the control panel display light up, it could mean that the service fuse needs replacing.

On the rear of the stove there is a fuse holding compartment which is located underneath the supply socket. Use a screwdriver to open the fuse-holder compartment and if necessary replace them (3.15 AT delayed)



### 5.2.3. Check of internal components



**ATTENTION!**

**The check of the internal electro-mechanical components must be carried out only by qualified personnel with technical knowledge of electricity and combustion.**

We recommend that an annual maintenance service is carried out, preferably under a programmed service contract. The essential part of this service is a visual and functional check on the internal components:

The following is a summary of the checks and/or maintenance tasks which are indispensable for the correct operation of the stove.

PARTS / INTERVAL	1 DAY	2-3 DAYS	30 DAYS	60-90 DAYS	1 YEAR
Grate	●				
Ash collection		●			
Ash drawer		●			
Glass		●			
Lower heat exchanger				●	
Complete exchanger					●
Smoke duct			●		
Door seal					●
Air filter			●		●
Flue pipe					●
Remote control battery					●

## 6. PROBLEMS / CAUSES / SOLUTIONS



### ATTENTION:

**All repairs must be carried out exclusively by a specialised technician, with the stove completely cold and the electric plug pulled out.**

PROBLEM	POSSIBLE CAUSES	REMEDY
<b>Pellets not being fed into the combustion chamber.</b>	<ul style="list-style-type: none"> <li>• Pellet hopper empty.</li> <li>• Feeder screw blocked by sawdust.</li> <li>• Reduction motor defective.</li> <li>• Defective electronic board.</li> </ul>	<ul style="list-style-type: none"> <li>• Refill pellet hopper.</li> <li>• Empty the hopper and manually free the feeder screw of sawdust.</li> <li>• <b>Replace reduction motor.</b></li> <li>• <b>Replace electronic board.</b></li> </ul>
<b>The fire goes out or the stove stops automatically.</b>	<ul style="list-style-type: none"> <li>• Pellet hopper empty.</li> <li>• Pellets not being fed in.</li> <li>• Intervention of pellet temperature sensor.</li> <li>• Door not closed properly or gaskets worn.</li> <li>• Unsuitable pellets.</li> <li>• Low pellet feed rate.</li> <li>• Combustion chamber dirty.</li> <li>• Smoke outlet obstructed.</li> <li>• Pressure switch cuts in.</li> <li>• Smoke extraction motor failed.</li> </ul>	<ul style="list-style-type: none"> <li>• Refill pellet hopper.</li> <li>• See previous problem..</li> <li>• Let the stove cool down completely, reset the thermostat till lockout ceases, relight stove; if problem persists, contact technical assistance.</li> <li>• Close the door <b>or replace the gaskets with original spare parts.</b></li> <li>• Change to a type of pellet recommended by the manufacturer.</li> <li>• <b>Have the fuel feed rate checked by technical service.</b></li> <li>• Clean the combustion chamber, following instructions in the manual.</li> <li>• Clean the smoke duct.</li> <li>• <b>Check if smoke duct is blocked and if the pressure switch is operating correctly.</b></li> <li>• <b>Check the motor and replace if necessary.</b></li> </ul>
<b>The stove runs for a few minutes and then goes out.</b>	<ul style="list-style-type: none"> <li>• Lighting cycle not completed.</li> <li>• Temporary failure of electricity supply.</li> <li>• Smoke duct obstructed.</li> <li>• Temperature sensors defective or broken.</li> <li>• Sparkplug failure.</li> </ul>	<ul style="list-style-type: none"> <li>• Re-run lighting cycle.</li> <li>• See previous instruction.</li> <li>• Clean smoke duct.</li> <li>• <b>Check and replace sensors as necessary.</b></li> <li>• <b>Check the plug and replace if necessary.</b></li> </ul>
<b>Pellets build up in grate, door glass gets dirty and flame is weak.</b>	<ul style="list-style-type: none"> <li>• Insufficient combustion air.</li> <li>• Pellets damp or unsuitable.</li> <li>• Smoke extractor motor broken.</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the room air intake is present and free.</li> <li>• Check that the combustion air filter on the pipe Ø 5 cm for air inlet is not obstructed.</li> <li>• Clean the grate and check that all the airways are clear.</li> <li>• Carry out a general cleaning of the combustion chamber and the smoke duct.</li> <li>• Check the state of the door gaskets.</li> <li>• Change the type of pellet.</li> <li>• <b>Check the motor and replace if necessary.</b></li> </ul>

PROBLEM	POSSIBLE CAUSES	REMEDY
<b>The smoke extraction motor does not work.</b>	<ul style="list-style-type: none"> <li>No electrical supply to the stove.</li> <li>The motor is broken.</li> <li>Defective electronic board.</li> <li>Control panel broken.</li> </ul>	<ul style="list-style-type: none"> <li>Check the supply voltage and the protection fuse.</li> <li><b>Check the motor and capacitor and replace if necessary.</b></li> <li><b>Replace electronic board.</b></li> <li><b>Replace the control panel.</b></li> </ul>
<b>The convection air fan runs continuously.</b>	<ul style="list-style-type: none"> <li>Temperature sensor defective or broken.</li> <li>Fan broken.</li> </ul>	<ul style="list-style-type: none"> <li><b>Check the operation of the sensor and replace if necessary.</b></li> <li><b>Check the operation of the motor and replace if necessary.</b></li> </ul>
<b>Remote control does not work</b>	<ul style="list-style-type: none"> <li>Remote control batteries flat.</li> <li>Remote control broken.</li> </ul>	<ul style="list-style-type: none"> <li>Replace batteries.</li> <li>Replace remote control.</li> </ul>
<b>In the automatic position the stove always runs at full power.</b>	<ul style="list-style-type: none"> <li>Room thermostat set to maximum.</li> <li>Temperature sensor defective.</li> <li>Control panel defective or broken.</li> </ul>	<ul style="list-style-type: none"> <li>Reset the thermostat temperature.</li> <li><b>Check the operation of the sensor and replace if necessary.</b></li> <li><b>Check the panel and replace if necessary.</b></li> </ul>
<b>The stove does not run</b>	<ul style="list-style-type: none"> <li>Lack of electricity supply.</li> <li>Pellet sensor in lockout.</li> <li>Fuse blown.</li> <li>Pressure switch broken (lockout indicated).</li> <li>Smoke outlet or duct blocked.</li> </ul>	<ul style="list-style-type: none"> <li>Check that the electric socket is plugged in and that the main switch is in position "I".</li> <li>Clear lockout by resetting the rear thermostat, <b>replace the thermostat if it happens again.</b></li> <li>Replace the fuse.</li> <li><b>Replace the pressure switch.</b></li> <li>Clean the smoke outlet and/or smoke duct.</li> </ul>

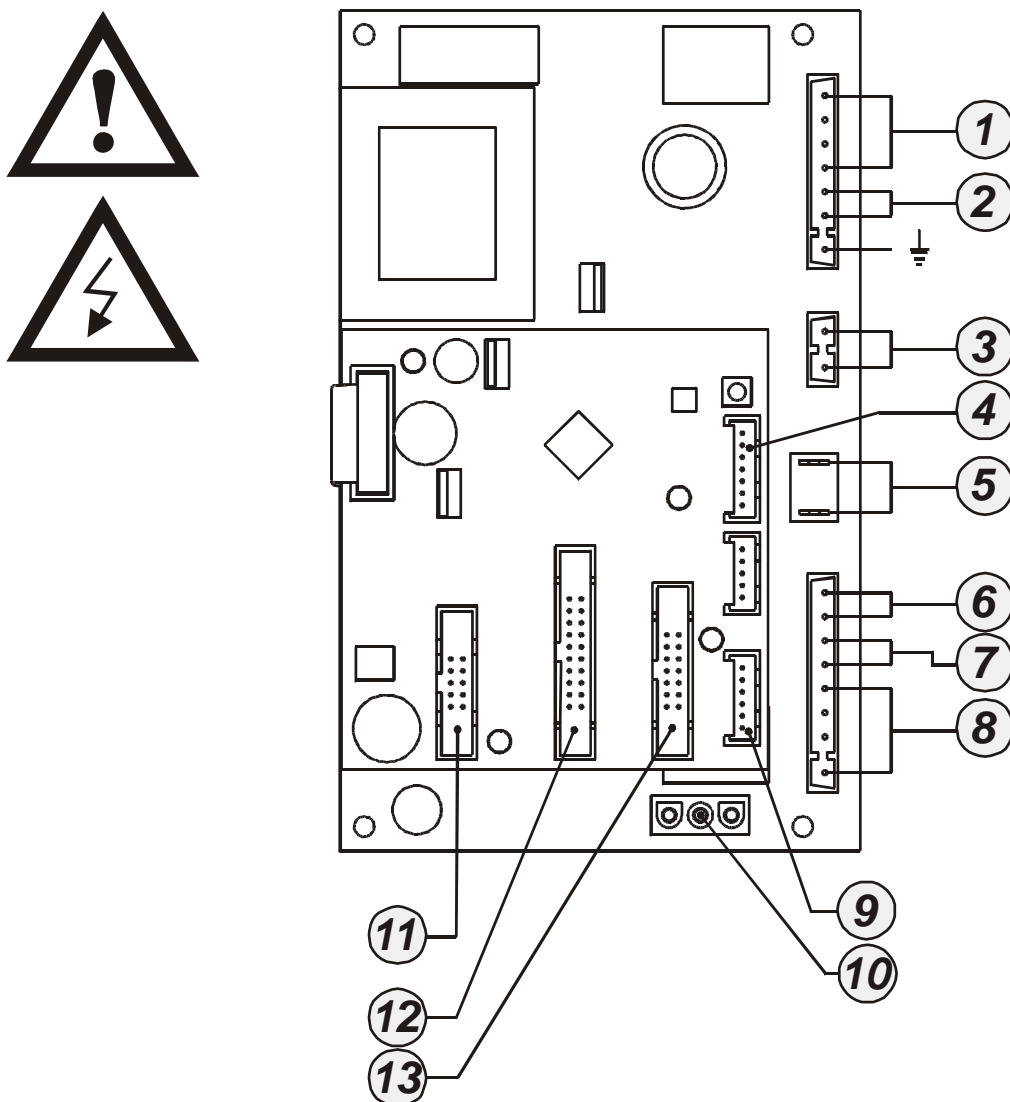


#### ATTENTION

The operations marked in bold type must be carried out by specialised MCZ personnel.

The manufacturer refuses to accept any responsibility and the guarantee lapses if this condition is not respected.

## 7. ELECTRICAL DIAGRAMS



### MOTHERBOARD WIRING KEY

- |                              |                                |
|------------------------------|--------------------------------|
| 1. Pellet ignition sparkplug | 8. Reduction motor             |
| 2. Switch                    | 9. RF receiver                 |
| 3. Warm air fan              | 10. Check of revs of smoke fan |
| 4. Smoke sensor              | 11. Air flow sensor            |
| 5. Smoke expulsion fan       | 12. Services interface panel   |
| 6. Bulb thermostat           | 13. Emergency panel            |
| 7. Pressure switch           |                                |

**N.B.** The electrical wiring of the single components includes pre-wired connectors which are of different sizes.



**MCZ S.p.A.**

Via Guglielmo Oberdan n°86  
33073 Vigonovo di Fontanafredda (PN) – ITALY

Telephone: 0434/599599 r.a.

Fax: 0434/599598

Internet: [www.mcz.it](http://www.mcz.it)

e-mail: [mcz@mcz.it](mailto:mcz@mcz.it)